Agri Max - Agri Power - Agri Star

macchine edili ed agricole S.r.l.
dDIECI

OPERATION AND MAINTENANCE MANUAL

Via E. Majorana, 2-4
42027 Montecchio Emilia (RE) ITALY
Tel. +39 0522 869611 Fax +39 0522 869744
www.dieci.com *- E-mail: mailbox@dieci.com*

CE

ATTENTION: ALWAYS KEEP A COPY OF THIS MANUAL ON THE MACHINE AT THE OPERATOR'S DISPOSAL

AXH1148/UK

EVERY TELESCOPIC LIFT IS ACCOMPANIED BY A COPY OF THIS MANUAL, A COPY OF THE ENGINE USE AND MAINTENANCE MANUAL DRAWN-UP BY THE MANUFACTURER OF THE SAME AND A COPY OF THE USE AND MAINTENANCE MANUAL RELATIVE TO EVERY DEVICE AND ALL EQUIPMENT WITH WHICH THIS VEHICLE IS SUPPLIED.

THESE MANUALS ARE WRITTEN BY THE RESPECT PRODUCT SUPPLIERS, OR REPRODUCED ACCURATELY AND IN FULL BY *DIECI* WITH THEIR SPECIFIC AUTHORISATION. THEY MAY INCLUDE ADDITIONAL SPECIFICATIONS WRITTEN BY *DIECI.*

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Dieci s.r.l.
VIA E. MAJORANA, 2-4
42027 - MONTECCHIO E. (RE) - ITALY
TEL. ++39 0522-869611
FAX ++39 0522-869744
e-mail: info@dieci.com

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Use and Maintenance Instructions

***DIECI S.r.l.* is not liable for damages caused as a result of the use of non-original parts**

UFF. ASSISTENZA E RICAMBI
Tel. ++ 39 0522-869611 - FAX ++ 39 0522-869744

DEPARTAMENTO DE ASISTENCIA Y REPUESTOS
Tel. ++ 39 0522-869611 - FAX ++ 39 0522-869744

BUREAU ASSISTANCE ET PIÈCES DE RECHANGE
Tel. ++ 39 0522-869611 - FAX ++ 39 0522-869744

SERVICE AND SPARE PARTS DEPARTMENT
Tel. ++ 39 0522-869611 - FAX ++ 39 0522-869744

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TRANSLATION OF THE ORIGINAL INSTRUCTIONS

Dieci-07/2010

WARNING:

All the documentation supplied is an integral and essential part of the product and must be kept where it can be easily accessed by every user. Users must carefully read the aforesaid documentation before starting to use the product.

Improper, incorrect or irrational use of the machine or its accessories is forbidden.
It is also forbidden to carry out any modifications that could alter the structure or function of the machine.

IT IS FORBIDDEN TO REPRODUCE ENTIRELY OR IN PART THE CONTENTS OF THIS MANUAL AND RELATIVE MULTIMEDIA PRODUCT: *Dieci S.r.l.* SHALL SAFEGUARD THESE RIGHTS.

1 Dieci **2** Dieci **3** Uff.Tec **4** Devid **5** MTKeR **7** Digigraph **9** 07/2010 **10** AXH1148/UK

ATTENTION: A COPY OF THIS MANUAL MUST ALWAYS REMAIN ON THE VEHICLE AT THE OPERATOR'S DISPOSAL

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Dear customer,

Congratulations and thank-you for choosing a machine.

This handbook has been written so that you can appreciate the qualities of this machine to the full.

It is advisable to read this handbook in its entirety before using the machine for the first time.

It contains information, advice and important warnings for use, which will help you to exploit the technical advantages of your machine fully.

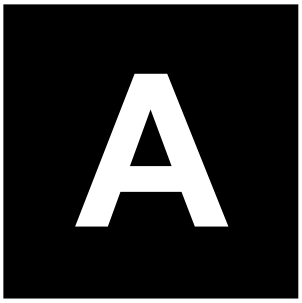
You will discover its specifications and special features, as well as find essential information regarding maintenance and care to ensure safe use and an extended lifetime of your machine.

The personnel, who will be at your assistance, wish you ALL THE BEST, certain that this handbook will prove an invaluable aid to fully appreciating your new machine.

Best regards,

The Sales Management

INTRODUCTION
VEHICLE IDENTIFICATION
WARRANTY



BEFORE COMMISSIONING THE VEHICLE, THE OPERATOR MUST THOROUGHLY READ THIS MANUAL IN ORDER TO COMPLETELY UNDERSTAND FUNCTIONING OF THE TELESCOPIC LIFT AND BE SUITABLY PREPARED FOR ITS USE.

USE OF THE VEHICLE DIFFERENT TO THAT DESCRIBED IN THIS MANUAL IS PROHIBITED AND RELIEVES *dieci* FROM ANY LIABILITY FOR INJURY/DAMAGE CAUSED TO PERSONS, ANIMALS AND OBJECTS.

DURING USE OF THE VEHICLE, SCRUPULOUSLY FOLLOW THE RESPECTIVE DIAGRAMS OF THE ACCESSORY MOUNTED.

INTRODUCTION

The purpose of this manual is to provide the Operator with efficient and safe instructions on the use and maintenance of the telehandler.

Following these instructions carefully will allow you to obtain, full efficiency and a long working life from your vehicle, and will help to make your work considerably easier.

This Use and Maintenance manual is provided by the Dealer upon delivery of the vehicle, in order to make sure that these instructions are read and correctly understood. Should you have trouble understanding any part of this manual, do not hesitate to contact your nearest Dealer for clarification, as it is of utmost importance that the operation and maintenance guidelines be fully understood and carefully observed. Routine maintenance should be carried out regularly, keeping a record of the vehicle's working hours.

Use only original spare parts when spare parts are required. Local Dealers can supply original spare parts as well as advice and instructions for their installation and use. The use of non-original spare parts may cause damage to other parts of the vehicle. Customers are advised to purchase all spare parts required only from an authorised Agent or Dealer.

Should the vehicle be destined for use in particularly severe conditions (for example on argillaceous or muddy terrain), we advise consulting your nearest dealer for specific instructions. Failure to observe these instructions may result in the vehicle's guarantee being voided.

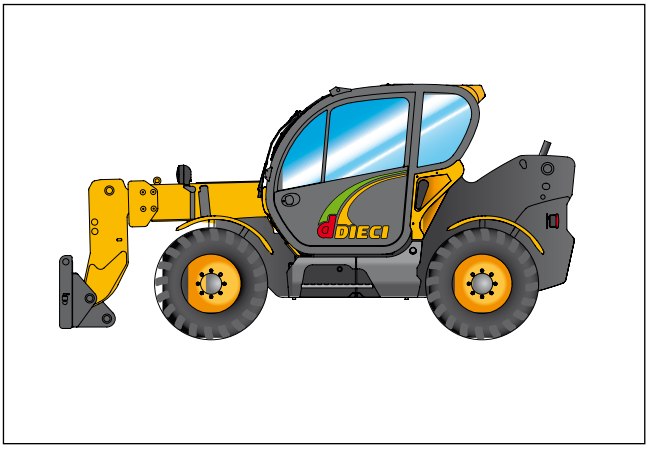
This manual has been published for worldwide distribution and the availability of certain equipment referred to as being essential or available on request may vary according to the geographical location in which the vehicle is being used. All details about the equipment available in your area can be obtained from your nearest Distributor or Dealer.

For manufacturing requirements, the standard production vehicles may differ in some details stated in this manual. The Company reserves the right to make modifications without forewarning.

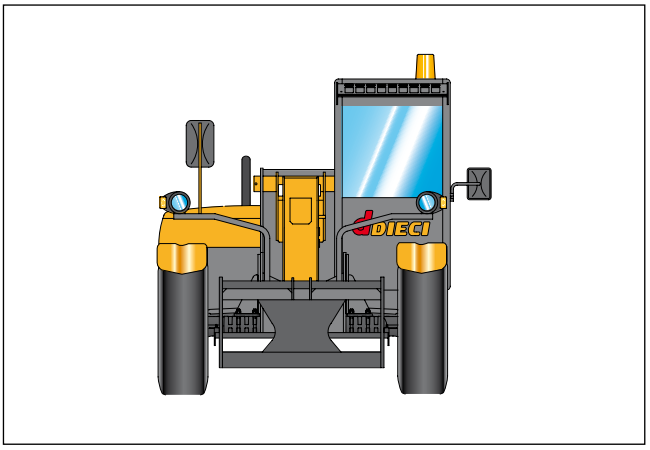
As a result of continuous technical improvements introduced, as well as updating and publication timetables, the data included in this manual may be subject to change at any time and should not be considered binding.

In some illustrations, the panels or covers have been removed in order to make the figure clearer. Never use the vehicle without these panels or protective coverings.

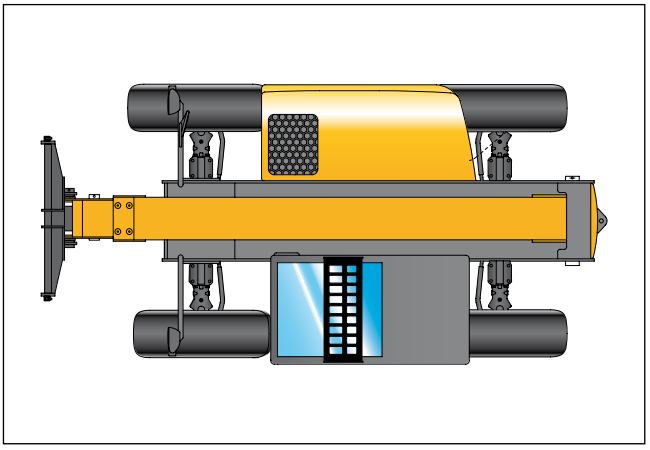
The left and right positions indicated in this manual refer to the vehicle as viewed from its back looking towards the front, or rather, the view of the operator when sitting in the driver's seat.



LEFT SIDE



FRONT VIEW



VIEW FROM ABOVE

WARRANTY

WARRANTY: TERM, STARTING DATE AND ACTIVATION

Warranty: term

DIECI S.r.l. (hereinafter referred to as ***DIECI***), guarantees its products for 12 months from delivery date to the end customer, but not exceeding 18 months from the date the machine left the manufacturer's factory (in sales to distributors or dealers).

Warranty: starting date

The guarantee is valid from the date the machine is forwarded from the factory (sale to distributors or dealers). When delivery is handled by the distributor or dealer, ***DIECI*** reserves the right to verify that the warranty starting date corresponds to the shipping or delivery date on the product transport document and/or the invoice date and may ask to see the original copies of these documents.

Warranty: activation

The warranty is activated automatically from the date the machine is forwarded from the factory (sale to distributors or dealers).

WARRANTY: VALIDITY

Warranty in countries with a customer service organisation

- The warranty covers the replacement or repair of faulty parts that have been proven defective in terms of material, manufacture and/or assembly.
- ***DIECI*** reserves the right to judge whether to repair or to replace defective parts.
- ***DIECI*** shall respond to claims using the means and methods it deems most appropriate.

DIECI shall be responsible for:
- The materials used.
- Labour.
- Travel and accommodation expenses.

The customer shall be responsible for:
- Packing and shipping costs for spare parts
- Any other possible expenses not listed under those for which ***DIECI*** is liable.

Warranty in countries without a customer service organisation

- The warranty consists exclusively of the free supply (ex works from the ***DIECI*** factory), of replacements for parts which can no longer be used because proven to be made of faulty material or due to faulty manufacture and/or assembly.

Examination of replaced faulty parts

- Before acknowledging the warranty, ***DIECI*** may ask for any faulty parts replaced during repairs to be returned (***DIECI*** shall cover shipping costs).

Additional warranty for repairs and replacement parts

- Any repairs carried out whether covered by the warranty or not, and any spare parts replaced during repairs, are guaranteed for 3 months from the date of repair or installation if the original guarantee has expired.

WARRANTY:
REQUEST FOR REPAIRS UNDER GUARANTEE

Warranty: reporting a fault or a faulty part

- The fault must be reported by the end user, dealer, distributor, retailer or by an authorised repair shop and must be sent directly to the ***DIECI*** customer service, within 8 days of the occurrence of the malfunction.
  The report must include a clear description of the fault and exact machine specifications (type, model and serial number). The specifications can be found on the machine in the positions indicated in the USE AND MAINTENANCE MANUAL.

Compulsory machine immobilisation

- If there is a risk that the fault may jeopardise safety and accident prevention or may cause further damage, it is forbidden to use the machine until it has been repaired and tested.

Warranty: exclusion from the warranty

The following conditions and parts are not covered by the warranty:

- Components subject to wear or deterioration due to prolonged use: the clutch, belts, brake pads, sliding blocks, rollers, oils and fluids, filters, etc.
- Electrical systems and components.
- Damage caused by the weather, natural disasters, acts of vandalism, etc.
- Any other malfunction not due to an ascertained original fault or for which ***DIECI*** cannot be held liable.

The following parts are also not covered by this warranty; they are covered by the warranty provided by the relative manufacturers:

- Diesel engine
- Axles and reduction gears
- Pumps and hydraulic engines
- Tyres.

Application of the aforesaid warranties shall be managed by ***DIECI***.

Any modification made to the machine requires a new test to verify conformity with directive 98/37 "CE";this procedure also applies in the case of repairs with non-original spare parts.

In case of any disputes, the Court of Reggio Emilia - ITALY- shall be recognised as the competent authority.

REASONS FOR NON-EFFECT, NON-ACKNOWLEDGEMENT OR TERMINATION OF THE WARRANTY

Warranty: non-acknowledgement

The warranty is not acknowledged:

- If the fault is not reported in the prescribed way and within the established expiry.
- If there is a failure to return any faulty parts replaced during repairs to ***DIECI*** as requested.
- If the machine is not immobilised; the warranty shall not be acknowledged for any damage caused by the failure to comply with this requirement.

Warranty: termination

The guarantee is terminated:

- If the purchaser does not fulfil payment obligations according to contract.
- If any damage is caused by carelessness, negligence, or by any use that does not comply with the specifications in the use and maintenance manual (incorrect manoeuvres, overloading, use of incorrect fuel, poor maintenance*, failure to use warning signals, etc.).
- If the malfunction is due to applications, attachments, modifications or repair work not authorised by ***DIECI*** or carried out using faulty spare parts. (For this reason, we recommend always using original spare parts).

* For "recommended routine maintenance" refer to the USE AND MAINTENANCE MANUAL.

Final terms

- In case of non-effect, non-acknowledgement and termination of the warranty, the purchaser shall in no circumstance be granted annulment of the contract, payment of damages, or an extension of the warranty.

- Any warranty conditions other than those listed above must be agreed in writing and signed by both parties.

IDENTIFYING YOUR MACHINE

MACHINE MODELS

- The Manufacturer offers a range of similar machines with different technical specifications and performances.
- When consulting any table or diagram in this manual or on the machine itself, always refer to the model code number for your machine.

Agri Max, Agri Power, Agri Star. TELEHANDLERS

LIABILITY

- The machines are manufactured in compliance with the EEC regulations in effect when the machine was made available for purchase.
- Failure to observe the use and safety regulations or using the machine in less than perfect working condition may cause an accident punishable by law.
- The Manufacturer shall not be held liable for any damage to persons, things or animals caused by improper use of this machine or by any unauthorised structural modification, application or transformation.
- The Manufacturer reserves the right to carry out any possible modifications to the machine for technical or commercial reasons without notice.

IDENTIFYING THE TELEHANDLER

The machine can be identified by the serial number punch marked on the front of the chassis and inside the cab. In addition to this, the engine has its own serial number punch marked on its block.

To ensure prompt and efficient service when ordering spare parts or when requesting information or technical explanations, always give the engine and chassis serial number.

Chassis serial number .....

Engine serial number .....

Cab serial number .....

Gear box serial number .....

Differential axles serial number .....
.....

Type of vehicle .....

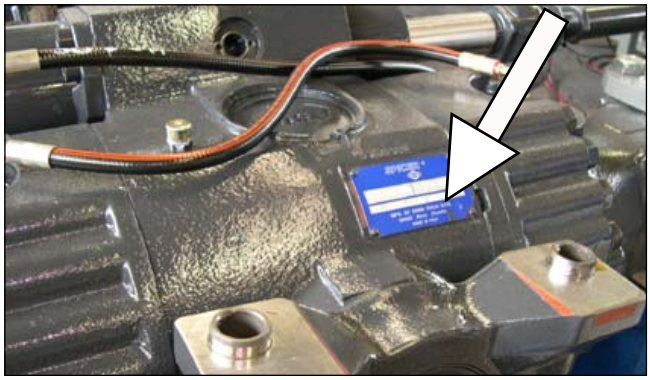
Owner/ Operator .....

Address of Dealer or agent .....
.....

Delivery date .....

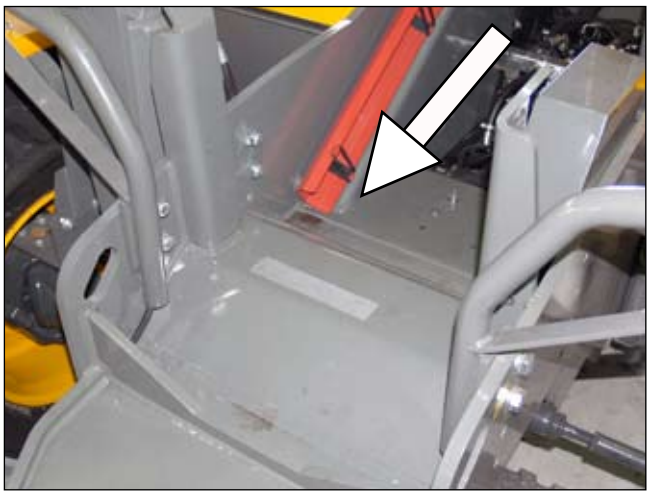
Warranty expiry date .....

NOTE:
The telehandlers commercially known as ***Agri Max, Agri Power, Agri Star*** are stamped with a type-approval code (see the first four numbers stamped on the chassis)

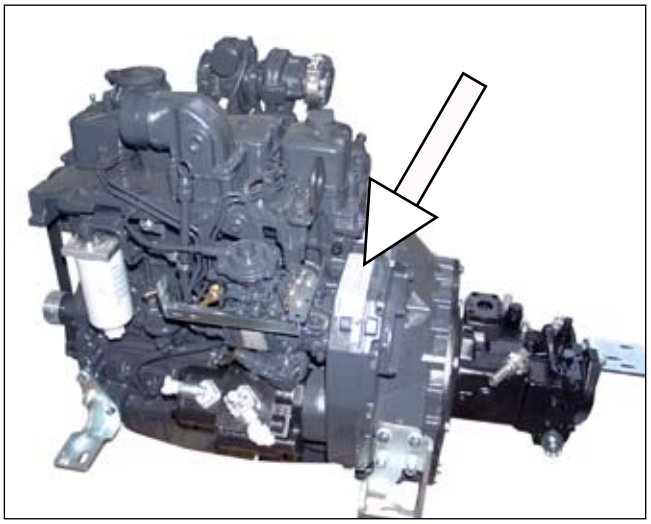


Axle serial numbers

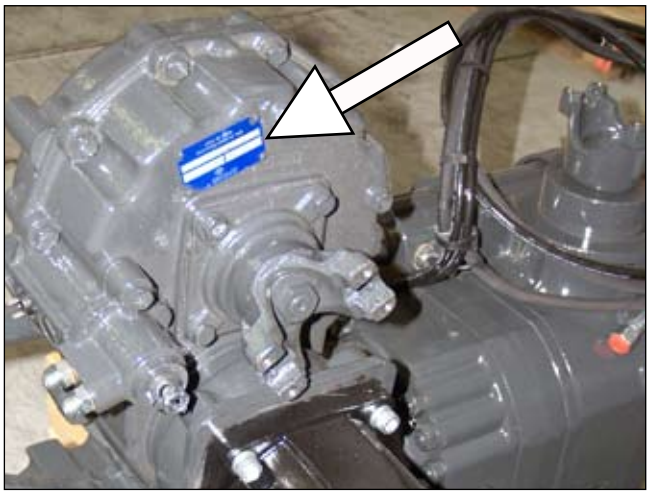
Fundamental data - cab plate



Agri Max, Agri Power, Agri Star



Engine serial number



Gear serial number

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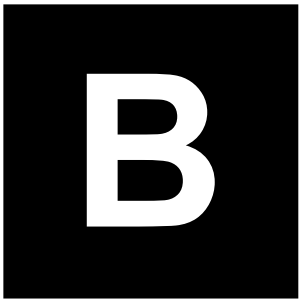
SAFETY REGULATIONS



ACKNOWLEDGING SAFETY REGULATIONS

This is the **"POTENTIAL HAZARD WARNING" SYMBOL.**

Wherever this symbol appears "⚠" appears, on the vehicle or in this manual, you must take care against potential damage or injury to the vehicle, other equipment, or people. Follow all recommended precautions and observe regulations for safe use and maintenance.

UNDERSTANDING WARNING NOTICES

In this manual certain terms are used to indicate different level of risk, including:

- DANGER -

Indicates a situation of potential danger for the vehicle's operator or other people directly involved in its operation.

- ATTENTION -

Indicates a situation of imminent danger which, if not averted, may cause damage to the vehicle and to the safety of the operator or others directly involved.

- IMPORTANT -

indicates a situation of imminent danger which, if not averted, may cause damage to the vehicle.

- PROHIBITED -

indicates strictly prohibited actions or things that are dangerous to personnel

The above-mentioned words are always accompanied by the corresponding potential hazard warning symbol.

- NOTE -

indicates an additional explanation for a given piece of information.

Carefully read the safety regulations given and follow all recommended precautions in order to avoid potential risks and safeguard your health and safety.

The "potential hazard" symbol and the "warning notices" have been included to highlight situations that ***DIECI*** feels are of particular importance.

However, this manual must be read completely and understood. If in doubt, contact the nearest agent or dealer.

GENERAL WARNINGS

This vehicle has been designed and constructed for use as a self-propelled vehicle, including an operator's driving seat, with tyres, intended for use on asphalt or natural surfaces and on rough ground. The vehicle consists of a main support structure aimed at supporting the extendible arm. Forks or other attachments approved by ***DIECI*** can be mounted on the boom head. In used normally, the vehicle lifts and places down loads through the extension/withdrawal and raising/lowering of the boom.

If the vehicle is used for purposes different than those for which it was designed, *DIECI* cannot be held responsible for damage to things, the vehicle itself, or for injury to persons caused by such improper use.

Use of the vehicle for purposes different than those described in this manual is strictly forbidden All functions and procedures concerning the operation and mounting of the vehicle's attachments that are not described in this manual are strictly forbidden.

The User's Manual and the parts catalogue are an integral part of the vehicle and must remain with it even when it is sold to a new owner. The manual, in the user's language, must be carefully stored aboard the vehicle at all times for quick reference. If the manual becomes creased, damaged or can no longer be easily read, it should be replaced immediately.

The instructions for use, maintenance and repair described in this handbook must be followed if the vehicle is to be considered as being operated in accordance with the manufacturer's intended uses.

This vehicle must be used, assisted or repaired only by persons that have received training in advance on the vehicle and on its safety regulations, in addition to being authorised to use the vehicle itself.

All of the procedures or maintenance operations not described in this manual are prohibited must only be carried out by authorised workshops.

The user must always observe the general safety regulations as well as those for accident prevention, such as traffic rules if the vehicle is used on public roads.

Any arbitrary modification made to the vehicle will relieve ***DIECI*** from all liability for damage or injury resulting from such modification.

Everything possible has been done during the design and construction phases of this vehicle to make your job as safe as possible. Due caution, however, is indispensable and there is no better rule to prevent accidents.

DIECI is not liable for damage caused by negligent use of this vehicle even if said damage is not a result of intentional improper use of the vehicle.

DIECI is not liable for damage resulting from operations performed instinctively, as a reflex, while in a state panic, or in the event of malfunctioning, accidents, etc. during use of the vehicle.

DIECI is not liable for behaviour foreseeable on the part of certain categories of people, including: apprentices, adolescents, disabled persons, personnel in training.

DIECI vehicles cannot be used for betting, competitions or personal use.

Read all of the safety stickers on the vehicle and observe all regulations printed on these stickers before starting up, running or refuelling the vehicle or before carrying out maintenance work. Clean the stickers if they are covered by dirt, cement or other deposits. Do not remove these stickers for any reason. Promptly replace any stickers which may be damaged, lost or illegible.

To guarantee your safety and that of others, do not modify the structure or adjust the various vehicle components (Hydraulic pressure, calibration of load limiters, engine rotation, assembly of additional attachments, etc.). The same holds true for the deactivation or modification of safety systems. In such cases, the manufacturer shall be absolved from all liability.

Periodic inspections must be carried out in order to maintain the vehicle's "compliance status."

Take all necessary safety precautions to prevent potential risks when carrying out operations or procedures that are not explicitly recommended or allowed for in this manual.

Do not carry out or engage in operations or actions expressly prohibited in this manual.

If in doubt, contact the nearest agent or dealer.

PROTECTIVE CLOTHING

- Always wear garments that are appropriate for the job you have to accomplish. Do not wear loose clothing, ties, chains, belts or other accessories that may become tangled in the control levers or other parts of the machine.
- Do not wear jewellery or metallic accessories that could cause injury if they become entangled or if the wearer is subjected to electric current.
- Tie back any long hair protruding from your safety helmet to ensure it does not become tangled in the machinery.
- The operator must wear suitable protective clothing to provide adequate accident prevention depending on the type of work or site.

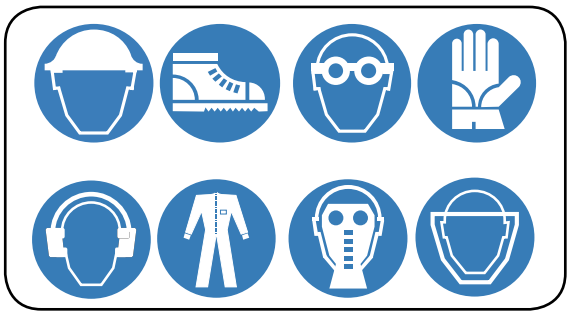
- DANGER -

Before starting to use the machine, the operator must ask the safety or site manager about possible risks and the type of protective clothing to wear.

- CAUTION -

The operator must always have the following:

- **Safety helmet;**
- **Safety shoes;**
- **Safety goggles or face shield;**
- **Safety gloves;**
- **Ear defenders;**
- **Reflective clothing;**
- **Waterproof clothing;**
- **Respirator or respiratory filter;**



- There are various types of safety garments of all sizes available on the market. Always use the most appropriate model for the type of application and ensure the garments fit properly.
- Safety clothing must be considered personal; do not wear other people's safety clothing.
- Safety clothing must always be complete and in good condition. A ruined garment no longer guarantees adequate protection. Do not wear garments that are worn; replace with new garments before you start working.
- Prolonged exposure to loud noise can damage your hearing or may cause loss of hearing. Always protect your hearing by wearing ear defenders or earplugs to protect yourself from excessive and tiresome noise.
- Do not listen to the radio or music through headphones to while using the machine. The operator must always pay the utmost attention.

INSPECTING THE MACHINE

- CAUTION -

Inspect the machine every day or every shift.
Carefully check the machine before resuming work.

- Ensure the tyres are suitable for the type of terrain. There are tyres for working on sand, earth, farmland, snow, etc. Consult your agent or dealer for more information.

- CAUTION -

If you discover any malfunctions (abnormal noise, vibrations, odour, instrument errors, smoke, oil leaks, etc.) or if the machine does not comply with safety regulations, stop using the machine and immediately inform their safety manager.

- **IT IS FORBIDDEN** for the driver to carry out any repairs or adjustments unless he or she has been specifically trained to do so. The driver must keep the machine in perfect working condition if entrusted to do so.

- CAUTION -

Before starting work, ensure the machine is fully efficient to guarantee maximum efficiency and compliance with all safety regulations.

- To carry out the checks listed below, consult the chapter about maintenance in this manual.
- Carry out the functional checks and inspections listed below.
  - Parking brake efficiency.
  - Engine oil level (check and top up if necessary).
  - Hydraulic oil level (check and top up if necessary).
  - Clogged air filter indicator (check and clean if necessary).
  - Tyre condition and pressure (check).
  - Fuel level.
  - Signalling and warning devices (check).
  - Steering efficiency.
  - Service brake efficiency.
  - Nuts and bolt torque.
  - Lights.
  - Direction indicators.
  - Hazard warning lights.
  - Switches.
  - Pilot lamps.
  - Windshield wipers.
  - Reversing alarm.

If the machine is not used for a long time, it must be checked more thoroughly than usual.

Check the machine is clean

- Clean all windows, lights and rear-view mirrors. Remove any mud or waste.
- Remove any rubbish or dirt from inside the cab, especially around the pedals and controls.
- Clean the engine, articulated joints and the radiator.
- Remove any excess grease.
- Ensure the footboard and the handle are clean and dry.
- Clean all safety stickers and manoeuvring indications. Replace them if they are illegible or missing.

Check for damage

- Ensure there are no damaged or missing parts.
- Ensure all articulated pins are fastened properly.
- Ensure there are no cracks or other damage to the windows.
- Ensure there are no oil, fuel or coolant leaks underneath the machine.
- Ensure the wheel bolts are properly tightened.
- Check every safety device.
- Ensure the ROPS/FOPS structure is not damaged.
- Ensure the seat belt and relevant attachments are not damaged or excessively worn.

- CAUTION -

If there are any malfunctions, contact one of the Manufacturer's Authorised Repair Centres.

- PROHIBITION -

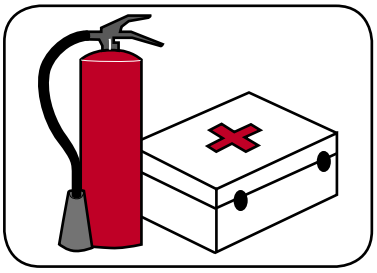
IT IS FORBIDDEN TO START OPERATING THE MACHINE UNLESS IT IS IN PERFECT CONDITION.

Adjustments

- Check the steering wheel and driver's seat adjustment to ensure it is possible to reach all driving controls comfortably. Adjust the rear-view mirrors so that it is possible to see the rear of the machine properly when sitting correctly.

PREPARING FOR EMERGENCIES

- You must always be prepared in case of a fire or accident.



- CAUTION -

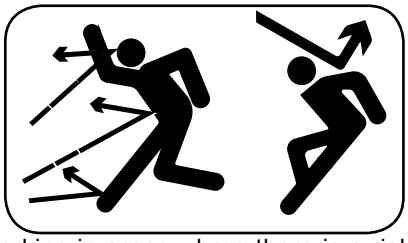
Always keep a first aid kit and fire extinguisher on hand (not supplied by the manufacturer).

- Carry out regular inspections to ensure the first aid kit is complete and if necessary, replace any missing items.
- Carefully read the instructions on the extinguisher to ensure it is used properly.
- Carry out regular inspections and maintenance to ensure the extinguisher is always ready for use.
- Establish a list of priorities with the safety or works manager to be able to cope with fires and accidents.
- If there is an accident, seek medical attention immediately.
- Ensure all emergency telephone numbers for doctors, ambulances, hospitals and the fire brigade are clearly visible near the telephone.

DRIVER'S CAB

- Use available footsteps and handles to reach the driver's seat.

- Always face the vehicle when getting in or out of it, maintain contact with the vehicle in three points at all times, using the handles and steps provided.
- Never use controls for purposes different than those for which they were created for (Ex.: get on or off the vehicle from the fork lift instead of from the footboard, hang clothing, etc.)
- Never jump down from the vehicle.
- Never get on or off a moving vehicle. Never jump on or off the vehicle.
- If the vehicle begins to move without an operator inside the cab, do not jump on the vehicle to try to stop it.
- Never get on or off the vehicle while holding equipment.
- Always keep footboards, steps and handles clean and make sure they are not slippery.
- Do not put any suction cups on the windows. The suction cups act as lenses and can cause fires.
- Do not use cell phones in the operator's cab during vehicle operation.
- Never bring dangerous items such as inflammable or explosive objects, in the driving cab.



- When working in areas where there is a risk of falling, bouncing or interference from objects capable of hitting the operator or entering the cab, mount suitable safety panels to protect the operator. Always close windows. Always ensure that bystanders are at a safe distance and cannot be hit by bouncing or falling objects.
- If the cab window on the telescopic boom side should break, risk of contact between the operator and the boom exists. Immediately stop operation and replace glass.

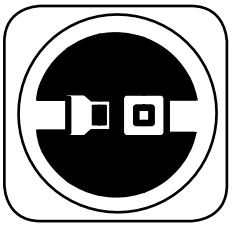
- PROHIBITED -

Operating the vehicle with arms, legs or any body part out of the driver's seat is STRICTLY PROHIBITED.

- CAUTION -

Only use the machine if the seat is adjusted properly. An incorrect seat adjustment can quickly tire the operator and force him or her to accomplish incorrect manoeuvres; it can alter the driver's perception of the controls and external objects; it can compromise sensitivity when carrying out manoeuvres.

- The seat must be adjusted according to the height and weight of the driver.
- The driver should be able to press the pedals down completely and operate the control levers correctly while keeping his/her back leaning well up against the back of the seat.



- DANGER -

Always fasten your seatbelt correctly before operating the machine.

- The belt is correctly adjusted when it fits snugly around your waist.

- DANGER -

The machine cab is strong enough to support the weight of the machine should it tip over (ROPS); therefore, it is essential that the driver remains firmly fastened in the seat thanks to the seat-belt to prevent him/her from falling out and possibly getting crushed.

- Before starting the machine, carefully check the belt, buckle and fastenings. If any parts are damaged or worn, replace the seat belt or the component before using the machine.
- Always remain seated with the seat belt correctly fastened while using the machine to reduce the risk of injury if you have an accident.
- After a serious accident, replace the seat belts even if they do not appear damaged.

- DANGER -

Do not carry passengers on the machine.

- DANGER -

The operator must always remain seated in the normal driving position.

AUTHORISATION TO DRIVE THE MACHINE

- CAUTION -

Comply with the legislation in effect in the country where the machine is used.

- CAUTION -

Only qualified and specifically trained staff may use the machine.

The machine may only be driven by people authorised to do so by the plant/site manager in charge of the premises where the machine is used.

- The user must always be able to produce the authorisation while using the machine.
- The driver may not allow any another person to drive the machine.
- Any use of the machine must also comply with good working standards.

STARTING THE MACHINE

- Regardless of the driver's experience, before starting the machine, take time to become familiar with the location and function of every control and instrument.
- Never drive the machine with wet or greasy hands or shoes.

- DANGER -

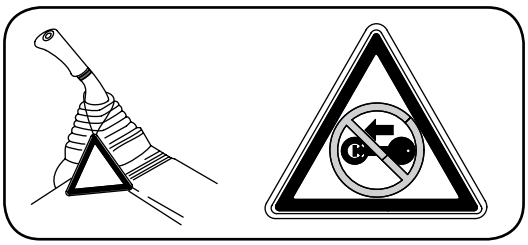
Before starting the engine, ensure all the control levers are in neutral, the parking brake is engaged, the engine bonnet is closed and that no one is standing near the machine.

- DANGER -

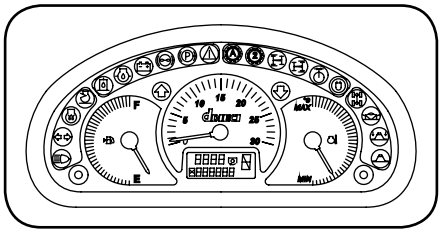
The machine may only be started or manoeuvred if the driver is sitting in the driver's seat with the seat belt properly adjusted and fastened.

The operator must always be in control of the machine.

- Use the audible alarm or other signals to warn anyone in attendance before starting the vehicle.
- The vehicle could move and cause unwanted damage if it is started up without following the correct procedure.



- Never start the engine or touch the levers if a danger sign is displayed inside the cab.
- Never start the engine by short-circuiting the terminals on the starting motor.
- If you use auxiliary batteries, beware because the gas in the auxiliary batteries could explode causing serious damage.
- When starting with auxiliary batteries, follow the instructions in the paragraph "STARTING WITH AUXILIARY BATTERIES". Any errors while carrying out the procedure can cause serious damage to the electrical/electronic systems, sudden machine movements, battery explosion, as well as damage to things and injury to people.



- Observe the control instruments immediately after starting the engine, after the engine has warmed up and at regular intervals during use to rapidly identify and solve any malfunctions.

SAFE OPERATION OF THE VEHICLE

⚠ - DANGER - ⚠

DO NOT USE THE VEHICLE IF YOU ARE UNDER THE EFFECT OF ALCOHOL, DRUGS OR IF YOU HAVE TAKEN MEDICATION THAT MAY MAKE YOU DROWSY OR ALTER YOUR REFLEXES.

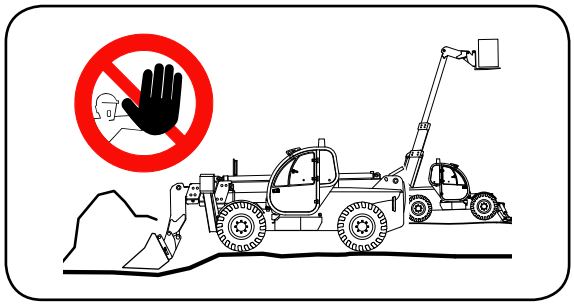
⚠ - DANGER - ⚠

DO NOT CARRY PASSENGERS ON THE VEHICLE OR IN THE DRIVER'S CAB OR ON ANY OTHER PART OF THE TELEHANDLER OR ON ANY OTHER MOUNTED ATTACHMENTS EXCEPT ON THE PASSENGER CONVEYING BASKET.

⚠ - DANGER - ⚠

CHECK THE CORRECT POSITION OF THE REAR VIEW MIRRORS. PAY ATTENTION AS THE PERCEPTION OF OBJECTS' POSITIONS THROUGH THE REAR VIEW MIRRORS MAY NOT BE EXACTLY AS THEY ARE; THEY MAY SEEM FURTHER AWAY OR NEARER THAN THEY ARE IN REALITY. DESPITE THE USE OF REAR VIEW MIRRORS, BLIND SPOTS MAY BE PRESENT AND THE OPERATOR MAY NOT ABLE TO SEE CERTAIN POINTS WELL. ALWAYS WORK WITH MAXIMUM CARE.

- While the vehicle is running, always keep light signals on. These serve to warn people that the vehicle is about to move.
- Inspect the work zone before beginning operation.
- Inspect the ground and the conditions of the land at the work site; ensure safe conditions before operating the vehicle. Do not use in places at risk for landslides or rock falling.
- Take due precautions to prevent that any unauthorised persons from entering the working area.
- When moving through or operating in shallow water or soft ground, verify the shape and the conditions of the land, the depth and speed of water flow beginning operation.
- Do not drive with foot on the brake pedal or with the parking brake engaged.
- Continually evaluate the stopping distance required.
- Do not drive at high speeds.
- Always look in the forward direction and maintain good road visibility. Frequently use the side view mirrors and check their conditions, cleanliness and position regularly.
- Keep windows, mirrors and lights clean and in good condition.
- Verify that bonnets and the door are closed before beginning operation.

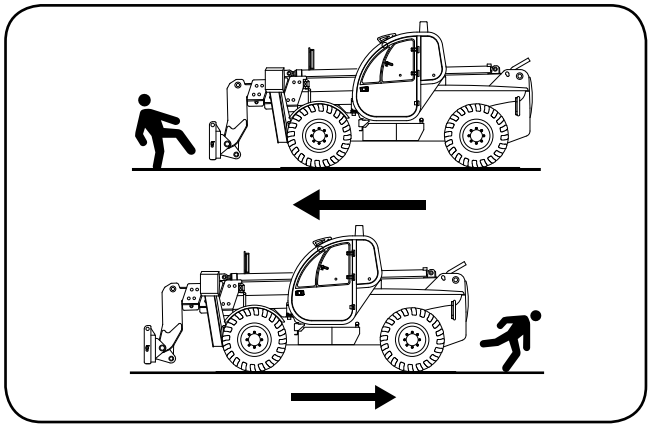


- When working in a congested area, always use the required signals; during operations that require the use of more than vehicle, use signals known by all personnel. Designate one person to signal and coordinate the work zone. Make sure that everyone follows the directions given by the person in charge of signalling.
- When working conditions require an operator on the ground, he/she must use hand signals in compliance with local regulations.
- When working alongside excavations or on the edge of the road or soft ground, keep at a safe distance as they vehicle may overturn. Designate a person on the ground to be in charge of signalling. have another person present on the ground. Remember that after strong rains, the use of explosives or an earthquake, the ground is more fragile.
- Operation on steep sloping roads can cause overturning or sliding. Take proper precautions.
- Always move in a straight line to go up or down a slope. Moving crosswise or along the slope is extremely dangerous.
- When working on slopes, the vehicle risks losing balance and overturning when working attachments are activated. Always remain in a stable position, do not utilise attachments.
- Drive slowly on grass, leaves or wet steel slabs. Even when operating on slight inclines the vehicle may slip, lose balance or overturn.
- When working on the upper part or inside buildings or other structures, ensure stability before beginning operations. The risk of collapse exists and can cause serious injuries or damage.
- Do not use the vehicle’s force of impact to carry out tasks. These vehicles have not been designed for said use, therefore, such use may cause vehicle overturning, damage, the breakage of components and attachments, and serious personal injury.

⚠ - ATTENTION - ⚠

Snow can hide obstacles and objects, and cover holes, dug-out areas and ditches.
Proceed with caution when working in snowy conditions. Operation of the vehicle if the quantity of snow does not allow for clear distinction of obstacles and possible dangers along the path IS STRICTLY PROHIBITED.

- Take care when clearing snow and do not venture off the main road; that which is hidden at the sides of the road may cause vehicle overturning or damage to various components.
- Surfaces covered by snow or ice are extremely dangerous. Operate with caution, reducing vehicle speed as much as possible and engaging levers slowly.
- Operate with caution. If the vehicle should sink into the snow, it may overturn or remain buried. Do not venture from the road and avoid remaining entrapped or buried under heaps of snow.
- Extra care should be taken, when working on icy terrain. Should the temperature rise, the ice could melt and the ground could become slippery.
- Use caution in the presence of electrical cables, ditches, or freshly excavated or worked ground.
- Make sure not to cause risk to others in the area when backing up the vehicle.
- Always check the space around the vehicle before carrying out any manoeuvres.



- Make sure there is no one in the vehicle's trajectory or in work zone.
- Designate someone on the ground to supervise manoeuvres if the operator's field of vision is obstructed. Always maintain visual contact with the person on the ground.

⚠ - ATTENTION - ⚠

Do not attempt to carry out operations which exceed the vehicles capacity.

⚠ - ATTENTION - ⚠

Do not lift loads exceeding the capacity of the vehicle or accessories and do not increase the size any counterbalance regardless of the artifice utilised.

- Avoid obstacles.
- When lifting a load, ensure that nothing and no one hampers the movement and avoid false manoeuvres.
- Never leave the motor running when no operator is present.
- Never leave the key in the vehicle when it is unattended.

⚠ - ATTENTION - ⚠

Never leave the vehicle in the parked position with a raised load.

- Dust, rain, fog etc. may reduce visibility. If visibility is limited, reduce speed and use appropriate lighting.

- The vehicles are equipped with a special lighting system for transfers. If working at night or in a tunnel, adequate external lighting must be used.
- Never lift a load using only a fork.
- Do not lift, move or rotate the attachment above any person. If loads fall or bangs occur, damage may result.
- Do not authorise people to come near to or pass underneath a load.
- During operation in certain conditions, particles of material may be ejected. In such conditions, it is a good idea to wear protective goggles and clear the area of those people not in possession of such goggles.
- Pay careful attention to crumbling walls, landslides, falling material or objects that may break the cab window and hit the driver.
- Never operate the vehicle under an overhang as this could give way and fall onto the vehicle.
- Do not excessively weigh down the vehicle or transport loads that may fall out or overturn.
- The simultaneous use of two vehicles to manage heavy or bulky loads is very dangerous and requires certain special precautionary measures. Such a manoeuvre may only be performed in very special cases and in the presence of person in charge of load transport.
- Do not operate near flammable material.

- ATTENTION -

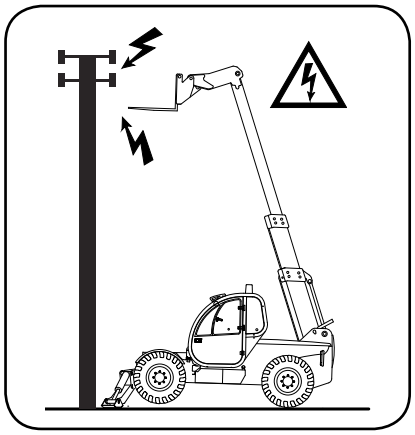
When manoeuvring the vehicle, pay attention to bulky parts above the vehicle. There are parts that jut out from the cab.

- The vehicle is equipped with a protective cab against falling objecting (FOPS). Use of a safety helmet is required if there is a risk of falling objects.
- Do not use the trolley at night, or in dark or scarcely lit conditions unless the vehicle is equipped with working lights (optional) for additional information, contact your local dealer.

- ATTENTION -

Do not get onto the cargo load without having checked that it is correctly positioned and anchored, that the vehicle to which it is connected (van, truck etc.) is not able to move, that the deck is able to support the total weight of the vehicle and its load, that the width of the deck is appropriate for that of the vehicle.

- Pay particular attention to loading docks, to trenches, scaffolding, to land that has been recently excavated or filled.
- When driving on roads or slopes pay close attention to the engine's RPM. A high engine RPM may result in mechanical damage. Always maintain control of RPMs and engine speed.



- ATTENTION -

If operating close to overhead electrical lines, check that the safety distance between the vehicle and the electrical line is sufficient.

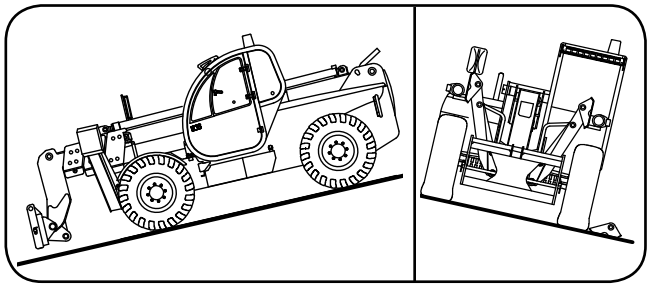
Consult your local electric company. In any case, do not work at a distance of less than 5 metres from the electrical lines Damp ground may increase the risk of electrocution.

- ATTENTION -

Operating or parking the vehicle too close to electrical cables leads to increased risk of being struck by lightning or being seriously injured.

***DIECI* strongly recommends that safety rules applied on-site comply with current local regulations regarding all types of work performed near electric power lines.**

- Designate someone on the ground to signal when the vehicle is too close to power lines.
- Do not allow anyone near the vehicle when operating in the vicinity of power lines. Wear rubber shoes and gloves as a precaution against possible emergencies. Cover the seat with a rubber piece of fabric and take care to not touch the chassis with any unprotected body parts.
- Should the vehicle collide with an electrical cable, the operator, to avoid electrocution, must never abandon the driver's cab until he/she is certain that the electrical power supply has been properly disconnected.



- Driving on side sloping roads may cause overturning or sliding. Take proper precautions.
- Do not leave the vehicle loaded on a slope exceeding 15%, even when the parking brake is engaged.

- To prevent damaging hydraulic connections when changing an attachment, stop the engine and wait a minute to remove pressure from the circuit. Always clean connectors before their reinsertion.
- Check the cleanliness, protection and the conditions of rapid detachment connections in attachment circuits daily.

- ATTENTION -

Operators who note that the vehicle is not operating properly or that is does not conform to safety regulations must immediately inform the construction site manager.

- PROHIBITED -

Operators are PROHIBITED from carrying out repair or adjustment work unless they have been trained to do so. Only the person charged to do so should carry out maintenance work on the vehicle.

- PROHIBITED -

Attempting to start up the vehicle by pushing or pulling on it is STRICTLY PROHIBITED. This may cause serious damage to people and/or the vehicle.

- If operating the vehicle at low temperatures (-10°C), empty and refill the tank using lubricants, fuel or cooling liquids suitable for such temperatures.

- ATTENTION -

The use of the vehicle in protected environments such as refineries or explosive atmospheres is STRICTLY PROHIBITED.

Special optional equipment is available for use in these types of locations. Contact your agent or dealer.

- Ensure that service brakes and horn are working properly.
- Slow down before turning.
- Maintain control of the vehicle and its speed in all situations.
- Do not drive in reverse for long distances.
- Brake slowly, avoid abrupt braking.
- Hydraulic steering is very sensitive to steering wheel movements. Steer slowly and avoid any sudden movements.
- The speed of vehicles with loads must never exceed 10 Km/h (5Km/h beyond 50% of the allowable load).
- Load transport on the road is forbidden and attachments mounted on the vehicle must be equipped with special prescribed attachments or must be removed.

- PROHIBITED -

Carrying people on or lifting people up with the vehicle is STRICTLY PROHIBITED unless the vehicle is equipped for said purpose and has a special certificate of conformity regarding the transport of people.

- Carefully follow loading programme instructions.

- ATTENTION -

Before each use, check that attachments have been properly mounted and secured on their corresponding supports.

- ATTENTION -

Prior to each use, check that the cab safety system has been set in compliance with the mounted attachment.

- Instructions supplied by the anti-tipping system must be considered valid for vehicles in standard working conditions, on flat, even ground and with properly functioning and correctly calibrated instruments. Regardless, limit values displayed on the load tables must never be exceeded.
- Never bring equipment near open flames.
- Never lift a load harnessed with a single fork or table.
- Make sure the vehicle is level before lifting the boom when operating on sloping ground.
- When moving on longitudinal slopes:

- Drive and brake delicately.
- When moving without loads turn forks or attachments downstream.
- When moving with loads turn forks or attachments upstream.

LOAD HANDLING

- ATTENTION -

Always adhere to safety regulations; always transport balanced, properly arranged loads to prevent overturning.

- Always fully insert forks under loads and bring them to the transport position (forks at 300 mm from the ground and slanted backwards, boom completely retracted).
- Always check that the pallets, boxes, etc. are in good condition and suitable for the type of load to be lifted.
- Manoeuvre the fork lift with the boom raised only in exceptional circumstances. In these circumstances, operate with due prudence, reduce speed as much as possible and brake delicately. Make sure that visibility is always sufficient. If necessary, ask an operator on the ground to guide operations.
- During handling operations, reduce speed as much as possible and brake delicately.
- Do not manoeuvre loads while the vehicle is moving.

- ATTENTION -

A load can only be handled in low gears "i" and "ii" (first and second).

- Before turning, slow down as much as possible, and monitor the load.
- Handle loads with care, at low speed and without sudden or skipping movements, above all if carrying at great heights.
- Do not change direction sharply or at a high speed.

- ATTENTION -

IF THE VEHICLE OVERTURNS, THE OPERATOR SHOULD NOT ATTEMPT TO EXIT THE DRIVER'S CAB DURING THE ACCIDENT. ALWAYS FASTEN SEAT BELTS WHEN DRIVING THE VEHICLE. ALWAYS KEEP SEATBELTS FASTENED WHENEVER INSIDE THE CAB.

- Always use the parking brake when setting down or lifting a load on a slope.
- Always ensure good visibility in the work area, including direct vision and visibility using rear view mirrors in order to check for the presence of people, animals, obstacles, holes and changes in slope etc.
- If visibility on the right side is limited during boom operation, before lifting, ensure that the work area is clear and make note of the position of any possible obstacles and irregularities in the terrain.
- Visibility is compromised when transporting circular loads in reverse; this operation must only be carried out for brief distances and there should be a worker on the ground to monitor all manoeuvres,
- Always ensure good visibility (clean windows, clean and properly working headlights etc.)

- ATTENTION -

The standard illumination of the telescopic loader is not suitable in working conditions with poor visibility or for use at night. There are several ways to improve visibility in poor lighting conditions.
Contact your local *DIECI* dealer.

- Lifting or transporting a load that exceeds the nominal capacity or the vehicle or accessory **IS PROHIBITED**.

- ATTENTION -

BEFORE LIFTING LOADS, OPERATORS MUST BE FAMILIAR WITH THE WEIGHT OF THE LOAD AND ITS CENTRE OF GRAVITY.

- Load tables are valid for centres of gravity that are 500 mm from the heels of the forks. Contact your dealer for information regarding centres of gravity at greater distances.
- Pay **CAREFUL ATTENTION** during the transport of loads with a variable centre of gravity (e.g. liquids). Operate with caution in order to limit such variations and to prevent the risk of vehicle overturning.
- Pay **ATTENTION** regarding the risk of limbs being crushed during manual fork adjustment operations.

PARKING THE VEHICLE

- Always park on flat, even and level ground where there is no risk of falling masses, landslides or flooding.
- Lower outriggers to the ground (if present)
- Retract the boom completely and lower it to the ground.
- Engage the parking brake
- Move the “direction” lever to position "N".
- Run the engine for a minimum of 60 seconds before switching off in order to cool the engine down.
- Turn the key to the halt engine position.
- Remove the key from the ignition.
- Block the hydraulic controls using the devices provided (when present).
- Close and lock windows using the specially provided handles.
- Close and lock the cab door.
- Place wedges under the wheels.
- Make sure that the vehicle is parked so that it does not block traffic and at least 3 metres away from railway tracks.

TEMPORARY HALT

- Gradually release the accelerator pedal.
- Bring the vehicle to a halt on flat ground.
- Engage the parking brake
- Move the “direction” lever to position "N".
- While the vehicle is being run-in (50 h) do not keep the diesel engine at minimum revs for too long.

- ATTENTION -

IF THE OPERATOR MUST ABANDON THE DRIVER'S SEAT, HE/SHE SHOULD FOLLOW THE INSTRUCTIONS PROVIDED IN THE PARAGRAPH REGARDING "PARKING THE VEHICLE"**.**

ROAD TRAVEL

- ATTENTION -

BEFORE THE VEHICLE IS TRANSFERRED TO THE ROAD MAKE SURE YOU ARE ACTING IN COMPLIANCE WITH THE RULES AND REGULATIONS PERTINENT IN THE COUNTRY OF USE.

THE OBLIGATIONS FOR ROAD TRAVEL ARE GIVEN IN THE VEHICLE REGISTRATION DOCUMENT.

- Dimmed headlights should be used during day hours and on roads where use of visual signals and lighting devices is not mandatory.
- Ensure correct operation and cleaning of headlights, directional lights and windscreen wipers.

- ATTENTION -

ENSURE CORRECT POSITIONING OF REAR VIEW MIRRORS.

PAY ATTENTION AS THE PERCEPTION OF OBJECTS' POSITIONS THROUGH THE REAR VIEW MIRRORS MAY NOT BE EXACTLY AS THEY ARE; THEY MAY SEEM FURTHER AWAY OR NEARER THAN THEY ARE IN REALITY.

ROAD TRAVEL (INSTRUCTIONS)

- Use the levelling control switch to level the vehicle‘s chassis in relation to the axles (if present).
- Ensure that all outriggers have been perfectly retracted and raised (if present).
- Close the telescopic boom completely. Lower the main boom completely and raise it slightly (300 mm from ground).
- Make sure the lights are functioning properly before driving the vehicle on roads. Check that the ‘slow vehicle’ revolving indicator light is installed and operational. Keep it activated during both day and night use.
- Carry out the wheel timing. IT IS MANDATORY to set steering as shown in the vehicle handbook and to block the selection lever using the relevant device. In Italy set the 4 wheel steering mode; on public roads do not use crosswise steering or 2 wheel steering.
- Ensure that the fuel quantity is sufficient.
- Mount all attachments provided for road driving in compliance with the country where operating.
- Install a overhanging load signal panel on the boom head before the entering onto the road.
- Always evaluate the itinerary to be covered, taking into consideration suspended structures (e.g. bridges, underpasses) that could be damaged by the vehicle.
- In some countries it is mandatory to place wedges under the tyres when the vehicle is stopped.
- Make sure that the vehicle complies with local regulations regarding number plates when travelling on roads during both day and night.

- ATTENTION -

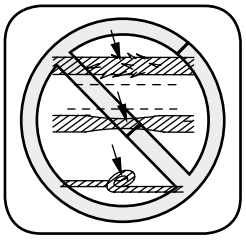
TRANSFER WITH EQUIPMENT FIXED TO THE FORK HOLDING PLATE IS NOT ALLOWED EXCEPT THOSE ACCEPTED BY THE LEGAL AUTHORITY OF THE COUNTRY WHERE THE VEHICLE OPERATES.

- ATTENTION -

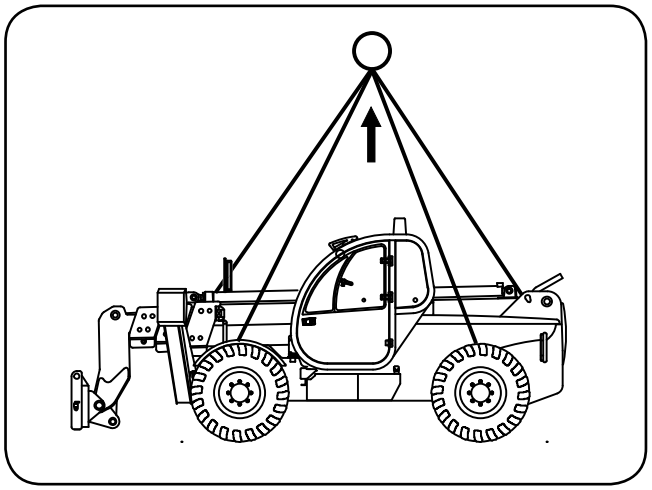
OPERATING THE VEHICLE ON THE ROAD WHEN IT IS CARRYING A LOAD IS PROHIBITED.

HOISTING THE MACHINE

- Disassemble any attachments from the machine.
- Completely retract and lower the boom.
- When the machine is in position, engage the parking brake and position the gear selector in neutral "N".
- Close the windows and lock the door of the cab.
- Ensure that the hoisting mechanism has a suitable capacity for the weight of the machine before attempting to hoist it. The weight of the machine is displayed on a plate.

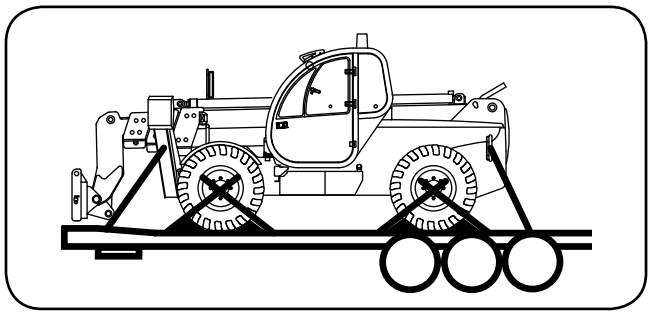


- Always ensure the devices used to anchor the machine (cables, chains, wedges, etc.) are in good condition; ensure they are not worn, broken or twisted.
- Check the capacity of the anchors before hoisting the machine.
- Check the overall dimensions of the machine.
- Use the hoisting points illustrated in the figure and marked on the machine with the appropriate symbols.
- Before hoisting the machine, ensure there are no unauthorised people in the surrounding area.
- Bear in mind the location of the centre of gravity of the telehandler.
- Slowly hoist the machine with the utmost care.



TRANSPORTING THE MACHINE

- Before transporting the machine, ensure that the rules and regulations of every area the machine will travel through are complied with.
- Disassemble any attachments from the machine.
- Completely retract and lower the boom.
- Before loading the machine onto the means of transport, ensure there is no grease, ice or other slippery substances on the machine or the ramp.
- Ensure the brake is engaged on the tractor and the trailer.
- Ensure the safety instructions regarding the transport platform have been applied correctly before loading the machine and that the driver of the means of transport is informed about the overall dimensions and weight of the telescopic handler.
- Load and unload the machine on solid and level ground.
- Check the overall dimensions for the maximum and minimum heights above ground and the permitted weight. Check the authorised soil contact pressure for the platform compared to the machine.
- Load the machine on the means of transport (ensure the ramps are correctly and safely positioned).
- Load the machine parallel to the platform.
- Manoeuvre the machine with caution onto the means of transport.
- When the machine is in a safe position, engage the parking brake and position the gear selector in neutral "N".
- Place wedges under the front and rear of the tyres on the machine. Anchor the machine to the means of transport with cables or chains. Tighten the cables and/or chains.
- Close the windows and lock the door of the cab.



- Use the anchor points illustrated in the figure and marked on the machine with the appropriate symbols.
- Always ensure the devices used to anchor the machine (cables, chains, wedges, etc.) are in good condition and that the capacity of the means of transport is suitable for the weight to handle.

- CAUTION -

Carefully comply with all the steps described above to ensure the machine is transported safely.

ELECTROMAGNETIC INTERFERENCE

- Some machines can be equipped with electronic components whose function can be influenced by electromagnetic interferences from other appliances that are not part of the machine. These interferences can be considered a danger to people.
- If any auxiliary equipment is installed, the user must check whether the installation causes any interference at all with the instruments on the vehicle; if it does, the user must get rid of the interference.

It is of the utmost importance to pay particular attention to mobile equipment, such as radio equipment (telephones) which must be installed by specialised technicians and feature external antennas.

In general, bear in mind that any additional electrical equipment installed must comply with Directive EMC EEC/89/336 and feature the “CE” mark.

VIBRATIONS

Take into account the following recommendations to reduce the operator’s exposure to vibrations:

- Always use tools that are suitable for the type of job to carry out.
- The driver’s seat must be correctly adjusted according to individual requirements. Inspect and if necessary repair the seat suspensions and adjustment mechanisms.
- Ensure that the machine is kept efficient and carry out machine maintenance as prescribed by the manual.
- Steer, accelerate, brake, change gear and move attachments smoothly.
- When in transit, adjust the speed of the machine to minimise vibrations. Reduce speed to avoid jolts. Transport the machine if there is a considerable distance between work sites.
- Keep the workplace in good condition, remove stones and obstacles, fill depressions or holes, etc.
- To avoid back problems, only use the machine if you are in good health. Take breaks to reduce the amount of time spent sitting in the same position. Never jump out of the cab or off the machine. Avoid repeatedly handling and lifting loads.

CARRYING OUT MAINTENANCE WORK SAFELY

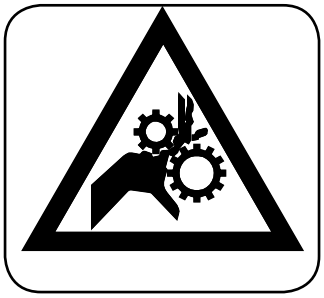
- Do not leave tools or other items lying around the workplace. Clean up any traces of grease, oil or other substances that could be slippery. Always keep the workplace clean and tidy so you can work safely.
- For the sake of safety, place rags soaked in grease and/or other inflammable materials in a safe container.
- Only use tools that are suitable for the tasks to carry out and ensure they are used properly. The use of damaged, poor quality, defective, random or unsuitable tools can cause serious injury.
- Never hit the machine or any part of the machine with hammers or other tools, splinters or rebounding tools can cause injury.
- It is possible to slip or fall on a machine covered in mud, oil etc. This will also make it more difficult to carry out a visual analysis of machine components during inspections or maintenance work. Carefully clean the machine before every intervention.

Do the following before carrying out any maintenance on the machine:

- Park the machine on flat and solid ground.
- Completely retract and lower the boom.
- Leave the boom raised and apply the safety rod if the maintenance work requires the boom to be raised.
- Allow the engine to idle for some 60 seconds to cool it down.
- Turn the ignition key to the engine off position.
- Remove the key from the ignition.
- Release any residual pressure in the hydraulic system by repeatedly acting on the hydraulic distribution levers while the engine is switched off.
- Apply a "Maintenance in Progress" notice on the door of the cab and inside the cab on the joysticks.
- Apply barriers and spacers to prevent unauthorised staff from approaching the machine.
- Disconnect the battery cut-off switch.
- Leave the engine to cool down.

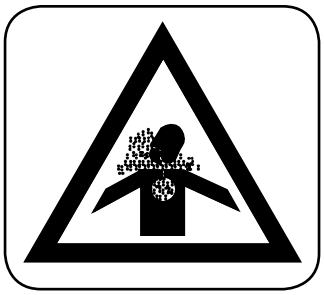
- Ensure you are familiar with the maintenance procedures before starting work.
- Keep the work area clean and dry.
- Do not lubricate parts or carry out any maintenance work when the machine is moving.

- Do not carry out any maintenance while the engine is running. If it is necessary to carry out maintenance work while the engine is running, seek the assistance of at least two workers and proceed as follows:
  - One person must remain seated in the driver's seat, ready to switch off the engine at any moment. All the workers must continually maintain contact with each other.
  - Take the utmost care to avoid being trapped by components while working near the fan, fan belt or other rotating parts.
  - Do not touch any levers or pedal controls. If it is necessary to act on any lever or pedal, always tell the others to keep at a safe distance.
  - Do not drop or insert any tools or other objects in rotating machine parts; the parts can break or fly into the air.
- If it is necessary to go underneath the attachment or the machine to carry out maintenance work or to service parts, firmly support the attachment and the machine with blocks and supports solid enough to support the weight.
- Place any attachments removed from the machine in a safe place, where they cannot fall. Adopt the due precautions to ensure that unauthorised people cannot enter the storage area.
- Do not place metallic parts on the battery.
- Any welding must be carried out by a qualified welder and in a place with adequate equipment. While carrying out any welding, there is a danger of gas leaks, fires and electric shock; therefore ensure such work is not carried out by unqualified personnel.
- Disconnect the wires from the battery before acting on the electrical system or before doing any arc welding on the machine.
- When carrying out electric welding, connect the ground terminal of the welding machine as near as possible to the area to be welded, to prevent the electric current from passing through ball bearings, articulated joints, hydraulic cylinders or reciprocal sliding parts. If welding is carried out near the oil or fuel tank, drain them beforehand.



- CAUTION -

ENTRAPMENT IN MOVING PARTS CAN CAUSE DAMAGE. TO PREVENT ACCIDENTS, ENSURE NO PARTS OF YOUR BODY, HAIR OR CLOTHING CAN BECOME TANGLED IN MOVING PARTS.



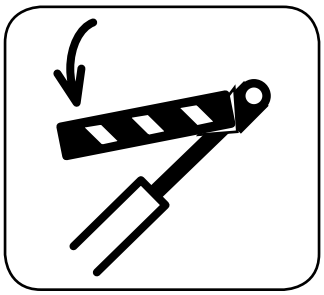
- DANGER -

ENGINE EXHAUST GASES ARE TOXIC AND CAN BE HAZARDOUS FOR YOUR HEALTH.

- DANGER -

THE MACHINE MUST BE PLACED OUTDOORS WHILE THE ENGINE IS RUNNING.

ONLY PLACE THE MACHINE INDOORS IF THE LOCATION IS ADEQUATELY VENTILATED AND THE MACHINE IS EQUIPPED WITH FILTERS.



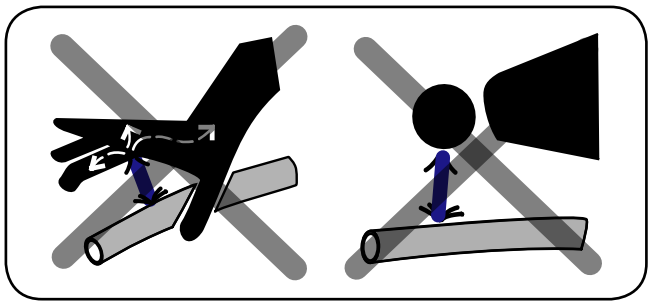
- CAUTION -

IF YOU NEED TO WORK UNDER ANY RAISED MOBILE PARTS, (BOOMS, SHOVELS, ETC.) BLOCK THE PARTS WITH SPACERS PLACED ON THE CYLINDER RODS OR PLACE THE PARTS ON ADEQUATELY SIZED SUPPORTS.

- Replace any worn or broken components.
- Eliminate any accumulations of grease, oil or deposits.
- After the machine has been used, the engine coolant will be hot and pressurised. Any contact with hot water and/ or steam may cause serious burns.
- Avoid any possible injury caused by hot water jets. Do not remove the radiator cap until the engine has cooled down. To open, unscrew the cap as far as possible. Before removing the cap, release any pressure.
- To prevent burns caused by oil or other red hot parts while checking or unloading, allow the oil to cool down (you should be able to touch the cap with your hand) before starting work. Even when the oil has cooled down, unscrew the cap very gently to release the inside pressure before removing.

- CAUTION -

BEWARE OF BURNS; THE ENGINE OIL OF THE REDUCTION GEARS AND THE HYDRAULIC SYSTEM, AS WELL AS THE PIPES, ENGINE AND OTHER COMPONENTS BECOME VERY HOT WHEN THE MACHINE IS IN USE. WAIT UNTIL ALL PARTS COOL DOWN BEFORE STARTING ANY MAINTENANCE OR REPAIR WORK.



- Fluids such as fuel or hydraulic oil under pressure can penetrate the skin and eyes causing serious injuries. Avoid these risks while carrying out repairs or maintenance on the machine.
- Discharge any pressure (using the hydraulic levers of the distributors) before disconnecting or repairing pipes or hydraulic parts.
- Do attempt to loosen fittings, hoses or hydraulic components while the circuit is pressurised.
- Before restarting the engine, ensure that all fittings have been properly tightened.
- Use a piece of cardboard to check for any leaks; ensure your hands and body are protected against pressurised fluids.
- Any fluids injected under the skin must be removed surgically. If there is an accident, seek medical attention immediately.
- Do attempt to loosen fittings, hoses or hydraulic components while the circuit is pressurised.
- Never touch the coolant in the air conditioner. If the coolant in the air conditioner squirts into the eyes, it can cause blindness; if it touches the skin, it can cause freezing phenomena.
- Cleaning with compressed air poses the risk of serious injury caused by flying particles. Always wear safety goggles, a dust mask, gloves and other safety equipment.

- CAUTION -

CHANGING THE ADJUSTMENT AND/OR DISASSEMBLING BALANCING VALVES AND SAFETY VALVES CAN BE DANGEROUS.

ONE OF THE AFOREMENTIONED VALVES CAN ONLY BE DISASSEMBLED IF THE RELATIVE JACK IS AT A STANDSTILL AND IF THERE IS NO PRESSURE IN THE HYDRAULIC CIRCUIT.

THIS OPERATION CAN ONLY BE CARRIED OUT BY AUTHORISED PERSONNEL.

- Only use the lubricants indicated by ***DIECI***, never use used lubricants.

STORING THE MACHINE/PROLONGED INACTIVITY

Before a long period of inactivity, observe a number of precautions, such as:

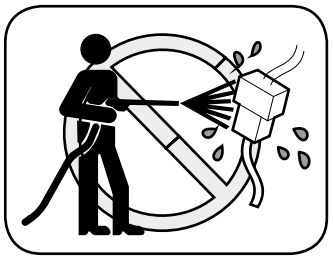
- Clean the machine.
- Touch up the paintwork where necessary to prevent rust.
- Lubricate all the lubricators.
- Check whether there are any worn or damaged parts on the machine and replace them as necessary.
- Drain the oil from the engine and replace with new oil.
- Clean the fuel system and change the filter cartridges.
- Empty the usual fuel from the tank and replace with ten litres of special fuel for long periods of inactivity. Allow the engine to run for ten minutes so the new solution is distributed evenly.
- Drain the coolant from the radiator and the cylinder block and refill with a solution of antifreeze and water.
- Store any equipment.
- Realign the turret.
- Completely lower the boom.
- Remove the battery and store in a warm, dry place. Recharge the battery regularly.
- Raise the machine onto stands to take the weight off the tyres.
- Cover the exhaust opening.
- Cover the exposed rods on the hydraulic cylinders with a light layer of grease.
- Close and lock all windows.
- Lock the door.

GETTING THE MACHINE READY AFTER A LONG PERIOD OF INACTIVITY

- Inflate the tyres to the correct pressure.
- Remove the stands from under the axles.
- Fill the fuel tank.
- Check the level of the coolant in the radiator.
- Check the various oil levels.
- Assemble a fully charged battery.
- Remove the cover from the exhaust pipe.
- Remove the layer of grease from the uncovered cylinder rods.
- Switch on the engine and ensure all controls are working properly.
- Leave the engine to idle without any load for a few minutes.
- Ensure the braking system is working properly.

CLEANING YOUR MACHINE

- Switch off the engine, remove the key from the ignition and wait for the various components to cool down.
- Wear appropriate protective clothing (gloves, mask, overalls, etc.)
- Do not use inflammable liquids, acids or products that may chemically corrode machine components.
- Do not clean moving or hot parts; allow the parts to cool because they could be damaged by abrupt changes in temperature.
- To clean the exterior of the machine and the engine compartment, use a power washer bearing in mind the following:
  - Ensure the filler caps are closed properly (radiator, oil tank, fuel tank, etc.)
  - Protect control units and connectors from water seepage.
  - Do not use water temperatures or pressures over 80°C and 100 bar respectively.
  - Do not hold the power washer nozzle less than 40 cm from the surface you are washing.
  - Do not concentrate the jet in just one place, wash using large strokes.
  - The interior of the machine is delicate and must never be cleaned with a power washer.



- If any water accidentally falls on the electrical system, the machine will not function correctly. Do not use water or steam to clean the electrical system, sensors or connectors.
- To repair any small defects on the bodywork, ask your ***DIECI*** dealer for tins of touch up paint. Ensure all the stickers are present; replace any stickers that are lost or removed while cleaning.

CLEANING THE WINDOWS

- The cab windows, headlamps and rear-view mirrors must be washed frequently with soapy water.
- After you have cleaned these components, dry carefully. Do not leave any stains or halos that may limit or distort the operator's view.

CLEANING THE CAB

- Clean the soft upholstery in the cab with a cloth that has been immerged in a solution of water and detergent and then tightly squeezed.
- Clean the driver's seat and the floor with a vacuum cleaner and/or a stiff brush. If necessary, use a damp cloth to remove any stubborn stains.

- CAUTION -

DO NOT USE JETS OF WATER INSIDE THE CAB.

- Clean the seat-belts with a sponge dipped in hot soapy water and simply leave them to dry.
- The fabric seats should be cleaned with a stiff brush or vacuum cleaner. Plastic seats should be cleaned with a damp cloth.

SAFETY STICKERS

- Consult the summary table in the chapter "MAINTENANCE" for the inspection schedule.
- Replace any Danger, Caution, Hazard or instruction stickers that are illegible or missing.
- Read all the safety warnings on the machine and comply with their contents before starting, running, refuelling or carrying out maintenance work. Clean said warnings if covered in mud, cement or other deposits. Do not remove for any reason. If damaged, lost or illegible, replace immediately. Orders must be placed using the same process as for spare parts (ensure you include the model and serial number of the machine when you place your order).
- The location and code numbers of the safety stickers are illustrated in chapter "B – SAFETY STANDARDS" in this manual.

FIRE PREVENTION

- CAUTION -

Stop the machine immediately if an alarm lights up in the cab. Contact your *DIECI* service centre and do not operate the machine until the fault has been repaired.

- Before every work cycle, ensure there are no leaks from the machine; fuel, oil, grease or lubricants in general can start fires and cause serious injury.

- Regularly check there are no loose or missing clamps, no twisted hoses or hoses that are rubbing together.

- Do not bend any pipes under pressure. Never install damaged pipes.

- Remove inflammable materials such as fuel, oil, grease, waste, deposits, accumulated dust or any other components that can start a fire.

- Avoid short circuits; they can cause fires.

- Regularly clean and secure all electrical connections. Before every work shift, ensure there are no twisted, hardened or damaged electricity cables. If there is a malfunction, do not start the machine and contact a ***DIECI*** service centre.

- Regularly check the ignition switch. A fault when stopping the engine will obstruct the work of the fire brigade.

- When cleaning parts with oil, use non-inflammable oil. Diesel and petrol fuel can catch fire. Do not use.

- Do not weld or use a cutting torch to cut pipes that contain inflammable liquids.

- When checking the level of fuel, oil, battery electrolyte, windscreen wiper liquid or coolant, always use an explosion proof light source. If other types of lighting are used, there is a risk of explosion.

- CAUTION -

IF A FIRE DEVELOPS, IMMEDIATELY ABANDON THE MACHINE AND FIND A SAFE PLACE; IF POSSIBLE TURN THE IGNITION TO "0" (ENGINE AND INSTRUMENTS OFF) BEFORE ABANDONING THE MACHINE.

- CAUTION -

ONLY ATTEMPT TO PUT OUT THE START OF A MODEST FIRE IF YOU HAVE AN EFFICIENT FIRE EXTINGUISHER AVAILABLE.

- CAUTION -

IF THE FIRE DIRECTLY INVOLVES THE OIL OR FUEL TANK, ABANDON THE MACHINE IMMEDIATELY; THE MACHINE COULD EXPLODE.

BATTERIES

- CAUTION -

TO AVOID BATTERY EXPLOSIONS, KEEP SPARKS, NAKED FLAMES AND CIGARETTES FAR FROM THE TOP OF BATTERIES BECAUSE THESE CAN PRODUCE HIGHLY INFLAMMABLE GASES.

- CAUTION -

THE BATTERY CONTAINS SULPHURIC ACID ELECTROLYTE, A CORROSIVE SUBSTANCE THAT MUST BE HANDLED WITH THE UTMOST CAUTION BECAUSE IT CAN CAUSE POISONING AND SERIOUS BURNS.

KEEP OUT OF REACH OF CHILDREN.

AVOID CONTACT WITH THE SKIN OR EYES.

- CAUTION -

WEAR PROTECTIVE CLOTHING AND SAFETY GLOVES AND GOGGLES. IN CASE OF CONTACT WITH THE EYES OR SKIN, RINSE IMMEDIATELY WITH ABUNDANT WATER AND CONSULT A DOCTOR. IF SWALLOWED, CONSULT A DOCTOR.

- Do not overturn or tilt the battery to avoid acid leakage.
- Charge the battery in a well-ventilated place and **ALWAYS** disconnect the power supply before disconnecting the terminals.
- Always use a voltmeter or a densimeter to check the battery charge. Use a torch to check the electrolyte level, never a naked flame. Never place anything metallic between the terminals to check the battery charge.
- **DO NOT** generate any sparks with the wire terminals while recharging the battery or while starting the engine with an auxiliary battery.
- Ensure the caps and air vents are correctly assembled and firmly tightened.
- Clean the upper part of the battery, ensure the clamps are firmly assembled and cover with a thin layer of Vaseline.
- If the battery freezes, put in a warm place to defrost. Do not use and do not charge; it could explode.
- In normal conditions, the battery is kept charged by the machine alternator. If the battery is completely flat through prolonged lack of use or because its lifetime is over, the alternator will no longer be able to keep it charged. The battery must be replaced and recharged using a battery charger.

Charging instructions

1. If possible remove the caps.
2. Check the electrolyte level.
3. Clean the poles.
4. Ensure the room is sufficiently ventilated.
5. Limit the charge current to a maximum 1/10 of the battery capacity (Ah).
6. Connect the battery to the charger.
7. Connect the charger to the power supply mains.
8. Switch on the charger.
9. The battery temperature must not exceed 55 °C.
10. When the battery has finished charging, disconnect the battery charger.
11. Disconnect the charger from the power supply mains.
12. Disconnect the battery from the charger.
13. Check the electrolyte level.
14. Reinstall the caps.

- Do not charge damaged batteries. Danger of explosion.
- Do not charge a hot battery. Danger of explosion.
- A battery is completely charged if at a constant temperature, the density of the electrolyte and the measured voltage at the poles does not increase within 2 hours.
- Every charge is as good as the general condition of the battery. This means that the charge of an old battery will not achieve the same lifetime and efficiency as a new battery.
- The most straightforward charge method is the constant power charge.
- When charging is over, the charger voltage increases and creates gasification. It is advisable to use straightforward chargers with minimum current control and a timer to switch the charger off.
- If the battery has a low electrolyte level, top up to the minimum level (just above the limit of the plates) and then charge. After ending the charge, fill to the maximum level (to avoid leaks).

Do not overcharge because:

a) It is a waste of energy that causes water disassociation.
b) It produces a loss of active mass due to the deterioration of the electrodes.
c) It creates a danger of explosion.

- If the sulphated batteries are charged without a voltage limit, they will reach boiling point and overheat.
- Charge old batteries with the utmost caution (they will probably be sulphated batteries). Even at 13.8 Volt, there is the risk of an increase in temperature.

- CAUTION -

All these procedures must be carried out by competent and trained staff.

- CAUTION -

Batteries contain substances that are particularly hazardous pollutants and must not be disposed of in the environment. Uncharged, old, damaged, etc. batteries must be disposed of appropriately.

Low maintenance batteries

Low maintenance batteries are designed to avoid maintenance during ordinary and normal battery use. If the battery is flat, check the electrolyte level and follow the instructions in the paragraph “BATTERY”. Please consult the supplier or manufacturer for technical specifications.

Maintenance-free batteries

These types of battery do not require any maintenance. When the battery is flat, it must be replaced. Please consult the supplier or manufacturer for technical specifications.

- CAUTION -

DO NOT CARRY OUT ANY MAINTENANCE OR ATTEMPT TO RECOVER MAINTENANCE-FREE BATTERIES.

STARTING UP WITH AUXILIARY BATTERIES

- CAUTION -

Two adequately trained and qualified people are required to start the engine using an auxiliary battery.

Any mistakes during this procedure can cause serious damage to the machine, things and people.

- When starting the engine from another machine, connect the batteries in parallel. When connecting the cables, avoid contact between the positive cable “+” and the negative cable “-“.
- Ensure you are wearing appropriate protective clothing before carrying out any procedures.
- Take care to avoid contact between the machine to be started up and the machine that has to supply the power, to avoid sparks and consequently explosions caused by the hydrogen produced by the batteries. If the battery explodes, it could cause serious damage and injury.
- Ensure you never accidentally switch the starting cables and connect first the ground lead (-) and lastly the positive voltage lead (+).
- Use great care when removing the starting cables; ensure that when the cables are disconnected from the battery they do not touch other parts of the machine to prevent hydrogen explosions.

- CAUTION -

THE CABLES AND THE CLIPS MUST BE SIZED ACCORDING TO THE POWER CHARGE TO BE TRANSFERRED.

THE CAPACITY OF THE BATTERY USED TO START THE MACHINE MUST BE GREATER OR AT LEAST EQUAL TO THE CAPACITY OF THE BATTERY ON THE MACHINE.

- CAUTION -

ENSURE THE CABLES AND CLIPS ARE NOT CORRODED OR DAMAGED.

ENSURE THE CLIPS GRIP THE TERMINALS FIRMLY.

- CAUTION -

TAKE THE UTMOST CARE DURING THE VARIOUS PROCEDURES, DIRECT OR INDIRECT CONTACT WITH LIVE PARTS CAN CAUSE INJURY AND SOMETIMES EVEN DEATH.

- CAUTION -

WHEN THE ENGINE IS STARTED, THE OPERATOR MUST BE SEATED IN THE DRIVER’S SEAT TO ENSURE THE MACHINE IS UNDER HIS OR HER CONTROL.

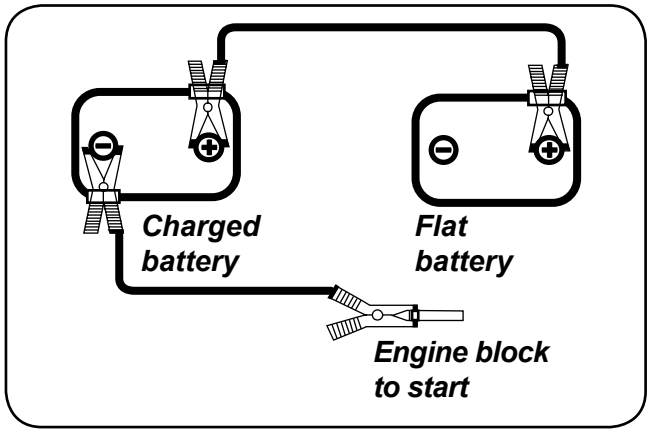
Connecting the cables and starting the engine

1. Ensure the ignition key is in position “O”.
2. Connect the positive poles “+” on the two batteries “A”.
3. Connect the cable on the negative terminal “-“ of the charged battery to the ground block on the machine to be started up “B”.
4. Start up the engine of the machine that is working properly and rev up the engine.
5. Start the engine of the machine that has broken down.

Removing the cables

With the engine running, remove the cables in the reverse order in which they were connected.

1. Disconnect the negative cable (-) from the ground block on the started engine and then from battery “B”.
2. Disconnect the positive cable “+” first from the battery used to start up and then from the battery of the machine with the flat battery. “A”.



- CAUTION -

ALL THESE PROCEDURES MUST BE CARRIED OUT BY COMPETENT AND TRAINED STAFF.

ELECTRICAL SYSTEM OVERLOAD PROTECTION

- CAUTION -

Burnt fuses must be replaced with another fuse of the same type.
Other types of repairs are forbidden, even if temporary.

- Do not connect or remove terminals, fuses or connectors while the machine is running or being electrically powered.

- CAUTION -

Any work on the electrical system must be carried out while the machine is disconnected from the power supply. Do not restore the power supply until the work has been completed and all covers and protection devices have been reassembled.

- Act on the battery cut-out to disconnect the power supply to the machine.
- Also disconnect the power supply by acting on the battery cut-out before replacing the battery.
- If a connector is damaged or no longer enters its housing, replace immediately to avoid short circuits, sparks, etc.

- CAUTION -

Damaged, pinched or burnt cables must be replaced immediately even if the damage only concerns the sheath or external insulation.

- Never connect or disconnect the charge circuit (including battery connections) while the engine is running.
- Never short circuit at the ground (earth) any charge components.
- Do not use an auxiliary battery with a rated voltage above 12 Volts.
- Always ensure the polarity is correct when installing batteries or using an auxiliary battery to start up using jump cables. Comply with the instructions in the use and maintenance manual when starting the machine with jump cables. Connect positive to positive and negative to negative.
- Always disconnect the negative cable from the batteries before carrying out any arc welding on the machine or any attachments connected to it.
- Position the welder ground terminal as close as possible to the area to weld.

- CAUTION -

If the welding needs to be carried out near an electrical module, the module must be removed from the machine. Ensure this procedure is carried out by qualified and authorised personnel.

- Ensure the welder cables are not above, near or cross any electrical cables or electronic components while welding is being carried out.

TIGHTENING WHEEL NUTS

- Tighten nuts in accordance with the schedule provided in the maintenance table
- When tightening the wheel nuts, torque should be as follows:

Wheel stud 18	kgm 50
Wheel stud 22	kgm 60

- Always tighten the nuts positioned opposite each other, not consecutively.
- After having remounted the wheel, tighten the nuts between the wheel and axles. Check that nuts are tightened each day until torque has stablised.

- ATTENTION -

THE NUMBER OF AXLE STUDS MUST CORRESPOND TO THE NUMBER OF TIGHTENED NUTS.THEREFORE ALL NUTS MUST BE MOUNTED IN ON EACH TYRE; OTHERWISE THE VEHICLE WILL NOT OPERATE.

- In the event of tyre replacement, the vehicle or the lifted side can be set back on the ground only with tyres mounted and properly tightened.

- ATTENTION -

NUT TIGHTENING MUST BE CARRIED OUT FIRST WITH THE VEHICLE, OR PARTS OF IT, LIFTED FROM THE GROUND, AND THEN WITH THE VEHICLE ON THE GROUND.

- Only use original ***DIECI*** nuts to tighten the wheels. Should even just a single nut be lost, contact the ***DIECI*** service centre.

TYRES

- ATTENTION -

UPON RECEIPT OF THE VEHICLE, CHECK TYRE AIR PRESSURE.

- Check tyre pressure every 100 hours and every two weeks. Pressure should be checked when the tyres are cold.
- Before each use, verify that the sides of the tyres are not damaged.

- ATTENTION -

TYRES THAT ARE TORN OR ARE EXCESSIVELY WORN SHOULD BE REPLACED IMMEDIATELY.

- Keep all oils, grease and corrosive liquids far from the tyres to prevent any damage to the rubber.
- Tyre pressure must be kept at the level indicated in the table. The tyre pressure given corresponds to the recommendations of the manufacturer, and should therefore be respected as far as possible.

Tyre pressure table

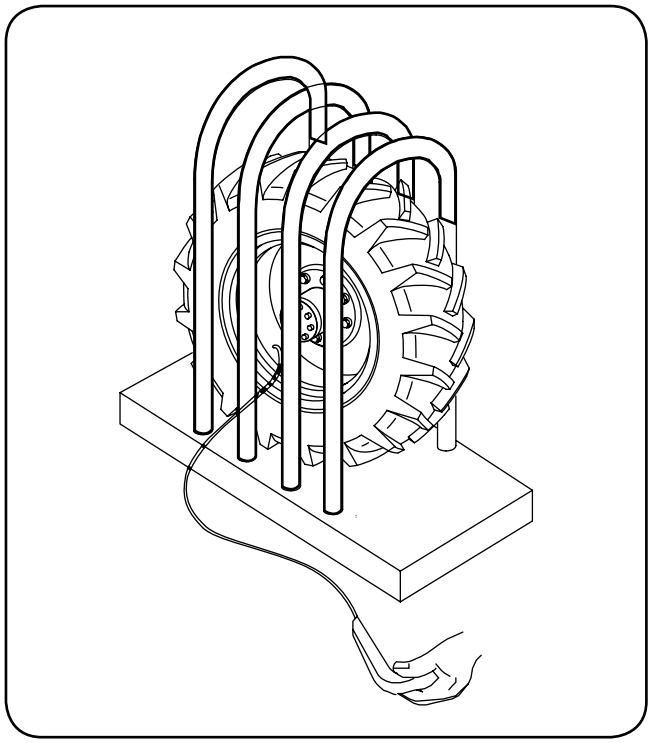
MISURA PNEUMATICO TYRES DIMENSIONS DIMENSION DES PNEUS DIMENSION DE LOS NEUMATICOS REIFENMASS	CARATTERISTICHE DETAILS CARATTERISTIQUES CARACTERISTICAS EIGENSHAFTEN	BAR
10,5 R18	10PR	3,75
12,5 R18	10PR	3,0
12,5 R18	12PR	3,0
12,5 R20	12PR	3,5
18 R19,5	16PR	4,5
16/70 R20	14PR	3,5
18 R22,5	16PR	4,5
405/70R20 (16/70-20)	14PR	3,5
405/70R20 (16/70R20)	152J	6,0
405/70R24 (16/70-24)	14PR	4,0
405/70R24 (16/70R24)	152J	5,0
445/65R22,5 (18R22,5)	169F	8,0
445/65 R22,5	168A8	8,5
14.00 R24	16PR	3,75
17.5L R24	16PR	4,0
445/70R24 (17.5LR24)	151G	4,1
500/70R24 (19.5LR24)	164A8	4,0

- Check the size of the tyres installed and the ply number to ensure they are inflated to the correct pressure.
- To ensure maximum efficiency do not use tyres with more than 80% wear.

- ATTENTION -

Inflating or working on tyres can be dangerous. Whenever possible, have specialised personnel intervene on or install tyres. To prevent serious or fatal injury, follow the safety precautions described below.

- Vehicle tyres are very heavy. Handle with care and ensure that, once stored, they cannot fall and injure anyone.
- Never attempt to repair a tyre on a public road or motorway.
- Make sure that the car jack is positioned on a solid, flat surface.
- Make sure that the jack is suitable to support the weight of the vehicle.
- Use jack tripods or other locking devices suitable for supporting the vehicle while repairing tyres.
- Never place any part of your body under the vehicle.
- Never start up the vehicle while it is on the jack.
- Never hit a tyre with a rim or hammer.
- Make sure that the rim is clean, and that there is no rust or damage. Do not weld, braze, repair or use a damaged rim in any way.



- ATTENTION -

WHEN MOUNTING A NEW OR REPAIRED TYRE, USE AN ADAPTER FOR THE SPRING VALVE WITH A DISTANCE MANOMETER WHICH ALLOWS THE OPERATOR TO KEEP AWAY FROM THE TYRE DURING INFLATION. USE A SAFETY FENCE SYSTEM.

- Do not inflate a tyre unless the rim is mounted on the vehicle or secured so that it will not move in the event that the tyre or rim should suddenly break.

- Never inflate tyres in excess of the pressure indicated by ***DIECI***. If the heel does not settle on the rim when this pressure level is reached, deflate the tyre and lubricate with a soapy water solution, then inflate again. Do not use oil or grease. Inflation exceeding the permitted level on unsettled heels can cause heel or rim breakage with an explosive force that can cause serious injury.

- PROHIBITED -

DO NOT MOUNT INFLATED TYRES WITH POLYURETHANE FOAM UNLESS AUTHORISED BY THE MANUFACTURER.

- Do not re-inflate a tyre which has completely turned or that is very deflated until it has been properly inspected by a qualified technician.
- After having remounted the wheel, tighten the nuts between the wheel and axles. Check that nuts are tightened each day until torque has stablised.

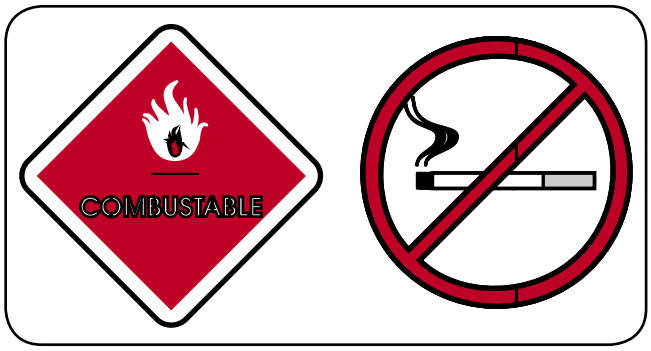
Replacing a tyre on the road

- When a tyre must replaced along the road, proceed as follows:

- If possible, park the vehicle on flat, even ground.
- Engage the parking brake.
- Switch off the engine.
- Engage emergency lights.
- Put wedges under tyres opposite from the tyre to be replaced in order to block the vehicle from moving in both directions.
- Loosen the bolts of the tyre to be replaced.
- Place the jack under the half-box of the axle, as close as possible to the tyre.
- Lift the tyre until it comes off the ground; position the safety support under the axle.
- Completely unscrew the bolts from the tyre and remove them.
- Remove the tyre with "push and pull" rotating movements.
- Insert the new tyre on the hub.
- Manually screw in bolts. Lubricate them with grease if necessary. Tighten bolts securely with a torque wrench.
- Remove the safety support and lower the telehandler with the jack.
- Re-tighten bolts to the tyre securely with a torque wrench.

STORING DANGEROUS FLUIDS

- Handle fuels carefully; they are highly inflammable. If fuel is ignited, there may be an explosion and/or fire.



- CAUTION -

All fuels, the majority of lubricants and some types of antifreeze are inflammable.

- All inflammable fluids must be stored in special containers and the contents clearly indicated. The containers must be airtight.

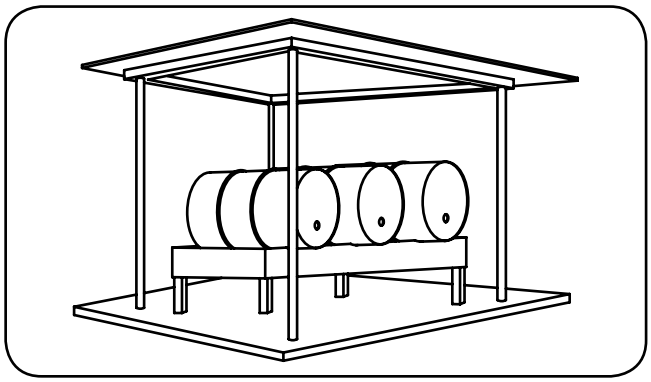
- CAUTION -

All fluids must be stored out of reach of children and unauthorised personnel.

- Different fluids must not be mixed together.

- CAUTION -

All chemical products are generally toxic; avoid contact with the skin and eyes by wearing suitable protective clothing. Do not swallow.



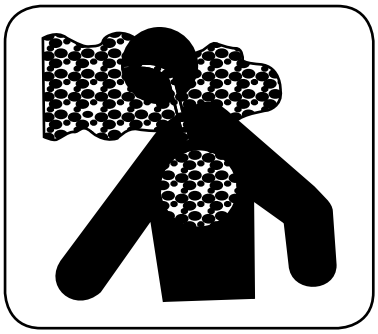
- CAUTION -

Store inflammable fluids in an especially reserved, well-ventilated storeroom, far from heat sources, sparks and flames.

Keep containers closed and indoors.

There must be no other substances inside the inflammable fluids storeroom (e.g. food).

- Always fill the tank in the open air.



- Beware of the fumes and vapours produced by chemical products. Do not inhale.
- Do not inhale combustion fumes.
- Ensure these chemical products are not dispersed in the soil, sewers or surface water. If necessary, inform the competent local authorities.
- In case of fire, use carbon dioxide, dry chemical powder, foam, water mist, sand or earth. Use jets of water to cool surfaces exposed to the fire.
- Ensure the storage containers do not leak inflammable fluids (fuel, oil, grease, lubricants in general).

CONTACT WITH DANGEROUS FLUIDS

- Avoid contact with the skin or eyes.
- Wear appropriate protective clothing.
- In case of contact with the eyes, rinse immediately with plenty of water for a few minutes holding the eyelids open and then consult a doctor.
- In case of contact with the skin, wash the area carefully with soap and water, remove any contaminated clothing, and if the skin tends to be dry, apply a moisturising cream.
- In case of inhalation, leave the contaminated area and reach a well-ventilated location. Consult a doctor in case of respiratory problems.
- If swallowed, consult a doctor. Show the doctor the label or the container. Do not provoke vomiting to avoid the risk of inhaling the product through the respiratory tract.

DIESEL

- Before handling fuel, filling the tank, etc., comply with the following rules:

- Never mix other types of fuel with diesel, such as petrol or alcohol.

- CAUTION -

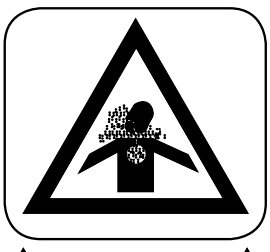
IT IS FORBIDDEN TO REFUEL WITH THE ENGINE SWITCHED ON.

- Clean the area around the fuel cap. Fill the fuel tank at the end of every day to reduce condensation during the work break.
- Water and sediment must be removed before they reach the engine.
- Do not use antifreeze to remove water from the diesel fuel.
- Do not rely on the filter to remove water from the diesel fuel.
- Never leave the fuel cap off and always lock. If you lose the original cap, replace with an original spare part. Not just any cap will fit.
- Keep an eye on the fuel pump nozzle while filling the tank.

- CAUTION -

DO NOT SMOKE DURING THE AFORESAID OPERATIONS.

- Do not use a flame to inspect the fuel tank.
- Do not fill the tank completely. Leave room for the fuel to expand and immediately clean any spillage.
- Before carrying out any welds on the tank or any components in close contact with the tank, ensure there is no fuel inside.
- If there are any fuel leaks due to breakages, stop the leak as soon as possible and contact a ***DIECI*** service centre.



- CAUTION -

AVOID INHALING DIESEL VAPOURS; THEY ARE CARCINOGENIC AND A HEALTH HAZARD.

RECOMMENDED FUEL SPECIFICATIONS

To ensure good performance, use a high quality fuel. The recommended fuel specifications are given below.

Cetane number	45 minimum.
Viscosity	2/4.5 centistokes at 40°C.
Density	0.8201860 kg/litre at 15°C
Sulphur	Sulphur 0.20% in weight, maximum.
Distillation	85% at 350°C.

Cetane number

The cetane number indicates the ignition capacity.
Fuel with a lower cetane number may cause ignition problems when the engine is cold and could affect combustion.

Viscosity

The viscosity value indicates the flow resistance; engine performance can be affected if the viscosity value is not within the limits.

Density

A lower density reduces engine power, higher density increases engine power and the smokiness of the exhaust fumes.

Sulphur

A high sulphur level wears out the engine and creates pollution.

Distillation

Distillation indicates the mixture of different hydrocarbons in the fuel. A high proportion of light hydrocarbons might affect the combustion specifications.

Fuel for low temperatures

If the engine needs to be used at temperatures below 0°C, special winter fuels can be used. These fuels have a lower degree of viscosity and restrict the formation of paraffin in the fuel. The formation of paraffin prevents the fuel from passing through the filter.

CLEANING AND STORING DIESEL FUEL

It is essential the fuel is kept clean.

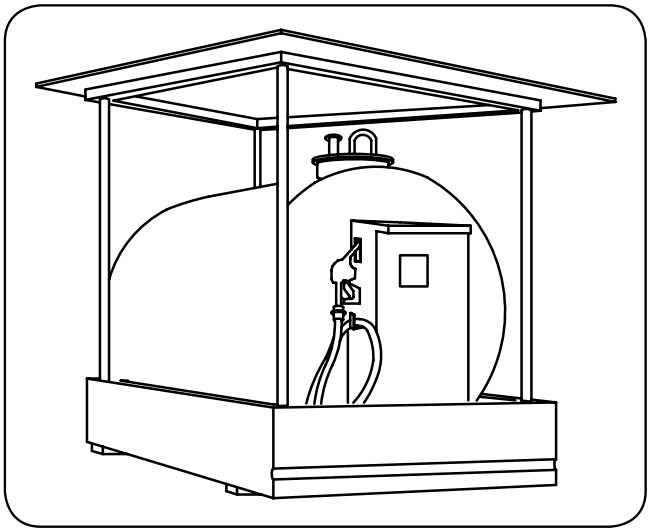
The advice given below will help to maintain the quality of the fuel.

1. Never use zinc containers.

2. Never clean the inside of fuel containers or fuel system components with cloths that may leave deposits.

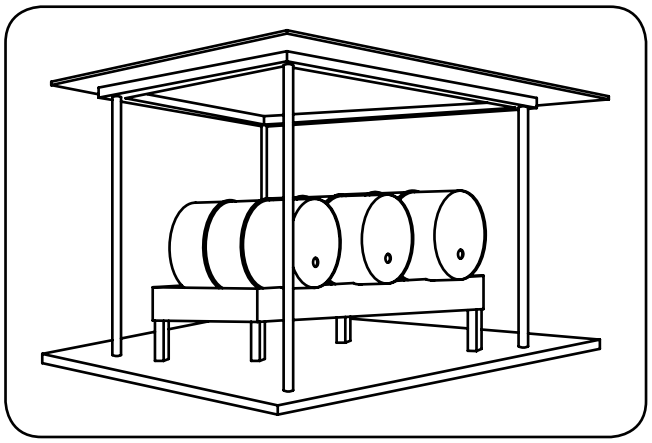
3. The capacity of the fuel storage tank must ensure that the intervals between one refuelling and the next are not too long. A capacity of 3,000 litres is sufficient for an average sized company.

4. The storage tank (see the figure below) must be covered and placed on a support high enough to exploit the force of gravity when refuelling the machine. A tank to collect any spillage must be located below. It should also be equipped with a manhole to allow access for cleaning.



5. The delivery tap must be larger at the bottom to trap any deposits; it should also be equipped with a removable filter. The tank must be tilted by 40 mm per metre towards the sediment drain plug.

6. Fuel barrels (see the figure below) must be stored under cover to prevent water seepage. The barrels should also be tilted slightly, to allow any water to drain off the upper rim. The fuel barrels must not be stored for too long before being used.



7. If the barrels are kept in the open, the cap must be tightly closed to prevent water seepage.

8. After refilling the fuel tank or barrels, it is advisable to leave the fuel to stand for at least two hours so that any water or impurities can deposit before the fuel is used.

ECOLOGICAL CONSIDERATIONS

- CAUTION -

A few helpful recommendations are listed below. Find out about the current standards and legislation in effect in your country.

Ask suppliers of lubricating oils, fuels, antifreeze products, detergents, etc. for information on the effects of these products on people and the environment and the regulations to be observed when using, storing and disposing of them.

- Do not refill tanks using unsuitable jerry cans or pressurised refuelling systems as they can cause leaks and loss of significant amounts of liquid.

- Modern lubricating oils contain additives.
  Do not burn contaminated fuel oils and/or oils used in conventional heating systems.

- Do not spill exhausted engine coolants, engine and transmission lubricating oils, hydraulic oil, brake oil etc. while pouring or draining them. Store safely until it is time to dispose of them in compliance with current legislation or local regulations.

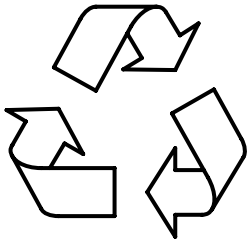
- Modern antifreeze fluids and their solutions (e.g. antifreeze and other additives) should be replaced every two years. Ensure they do not soak into the soil. They must be collected and disposed of appropriately.

- Do not work directly on the air conditioning system (optional). Do not open the air conditioning system. It contains gas that must not be released into the atmosphere. Contact your dealer or an expert who has the equipment required to refill the system.

- Immediately repair any leak or fault in the cooling or engine hydraulic systems.

- Do not increase the pressure in a pressurised system, the components may explode.

WASTE DISPOSAL



- Waste material should not be scattered in the environment but disposed of appropriately. Used lubricants, batteries, greasy rags, brake pads, etc. must be handed over to specialised companies authorised to dispose of pollutant waste.

- Improper waste disposal is a threat to the environment. Potentially hazardous waste includes lubricants, fuel, coolant, filters and batteries.

- Do not dispose of waste on the ground, in sewers or waterbeds.

- Contact your local authority or waste collection centre for information on how to recycle or dispose of waste properly.

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CHECKING THE WIND SPEED

- Variations in wind speed can cause several inconveniences such as loss of machine stability, load oscillation, and a reduction in visibility due to blowing dust, leaves, etc.

- Other unfavourable factors affecting machine use include:

- Site location; the aerodynamic effect of buildings, trees and other structures increase the wind speed.
- The height of the extended boom; the higher the boom, the higher the wind speed.
- Load dimensions; the larger the area occupied by the load, the more it is affected by the force of the wind.

⚠ - CAUTION - ⚠

***DIECI* telehandlers can be used in wind speeds up to 45 Km/h equal to 12.5 m/s (no. 6 of the Beaufort scale) measured at ground level.**

⚠ - CAUTION - ⚠

At a temperature of 10°C, in winds with a speed of 32 Km/h, the sensation of exposed body parts is a temperature of 0°C; the higher you are the higher the wind speed and the colder you will feel.

⚠ - CAUTION - ⚠

If there is a fresh breeze (fig. 1/B n. 5 in the Beaufort Scale), never raise loads with a surface area greater than one square metre.

Below is a graph of the Beaufort scale (fig.1/B) to give an indication of the wind speed at which you can work and when to suspend work if certain values are exceeded.

THE BEAUFORT WIND SCALE

No	DESCRIPTION	CONDITIONS	SPEED m/s
0	Calm	Smoke rises vertically	0 - 0,2
1	Light air	Direction of wind shown by smoke drift	0,3 - 1,5
2	Light breeze	Wind felt on face; leaves rustle; ordinary vanes moved by wind.	1,6 - 3
3	Gentle breeze	Leaves and small twigs in constant motion; wind extends light flag	3 - 5
4	Moderate breeze	Raises dust and loose paper; small branches are moved.	5 - 8
5	Fresh breeze	Small trees in leaf begin to sway; crested wavelets form on inland waters.	8 - 11
6	Strong breeze	Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult	11 - 14
7	Near gale	Whole trees in motion. Effort needed to walk against the wind	14 - 17
8	Gale	Breaks twigs off trees; generally impedes progress.	17 - 21
9	Severe gale	Slight structural damage occurs (chimney-pots and slates removed)	21 - 24

(fig.1/B)

EVALUATE THE CONSISTENCY OF THE GROUND

The ground on which the telehandler is positioned must be able to support the machine and its maximum load.

- CAUTION -

If the ground under the telehandler collapses, the machine may roll over.

- Comply with the following indications to avoid overturning the machine:

- Ask your employer (works manager, construction assistant) if there may be any hidden cavities below the stabilisers (pipelines, wells, old cisterns, basement ceilings, manure pits, etc.)

- The operator must evaluate the consistency of the ground, using the tables and graphs provided. In case of doubt, consult the civil engineer present on the site or seek the advice of an external engineer.

- Depending on the type of ground and its geomorphologic characteristics, the subsoil can only support a limited quantity of stress. The table in fig.3/B indicates the allowed surface pressure underneath the telehandler stabilisers.

- On the basis of the "*Maximum pressure exercised on the ground by the stabiliser feet*" Table (fig.2/B) and the data extracted from the table in fig.3/B, "*Allowed surface pressure on varying ground types*", it is possible to deduct the necessary support surface (increased support bases).

- CAUTION -

Always seek the advice of a civil engineer for the most reliable and exact evaluation possible of the ground where you intend to work and the dimensions of the support plates.

- CAUTION -

On request, *DIECI* can provide enlarged base supports.

EXTENSION (mt)	PRESSURE (kg/cm)
7 mt	10 kg/cm²
8 mt	10 kg/cm²
9 mt	10 kg/cm²
10 mt	10 kg/cm²
11 mt	10 kg/cm²
12 mt	10 kg/cm²
13 mt	10 kg/cm²
14 mt	10 kg/cm²
16 mt	10 kg/cm²
17 mt	10 kg/cm²

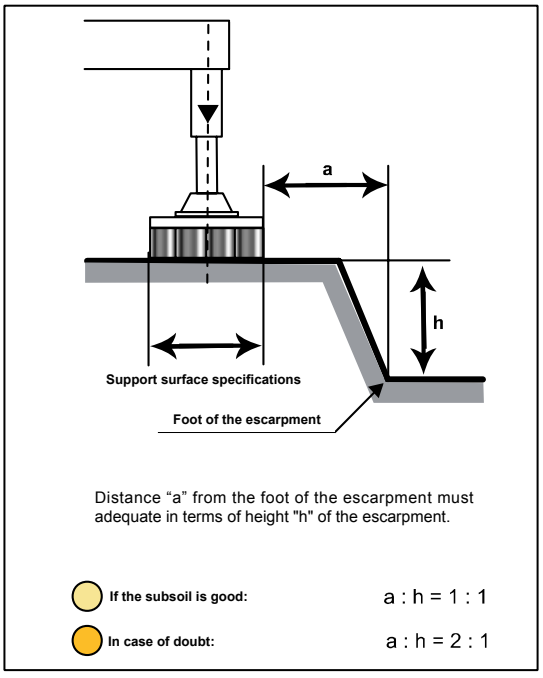
(fig. 2/B) "Maximum pressure exercised on the ground by the stabiliser feet" Table

Type of ground, geomorphologic specifications		Allowed surface pressure Kg/cm²	N/mm²
Loose, non-compacted ground		Generally not solid, requires special measures	
Limey, peaty, pasty ground			
Coherent, soft ground			
Incoherent, well compacted ground, sand, gravel		2.0	0.2
Coherent ground	Solid	1.0	0.1
	Semi solid	2.0	0.2
	Hard	4.0	0.4
Rock, concrete, road surface suitable for the transit of heavy goods vehicles		Over 10.0	Over 1,0

(fig. 3/B) Allowed surface pressure on varying ground types

Maximum load bearing capacity	Allowed surface pressure		
	1 Kg/cm²	2 Kg/cm²	4 Kg/cm²
	Necessary support surface		
10t	1.0m x 1.0m	0.7m x 0.7m	0.5m x 0.5m
20t	1.4m x 1.4m	1.0m x 1.0m	0.7m x 0.7m
30t	1.7m x 1.7m	1.2m x 1.2m	0.9m x 0.9m
40t	2.0m x 2.0m	1.4m x 1.4m	1.0m x 1.0m
50t	2.2m x 2.2m	1.6m x 1.6m	1.1m x 1.1m
60t	2.4m x 2.4m	1.7m x 1.7m	1.2m x 1.2m

(fig. 4/B) Dimension of the support surface compared to the geomorphic characteristics of the ground

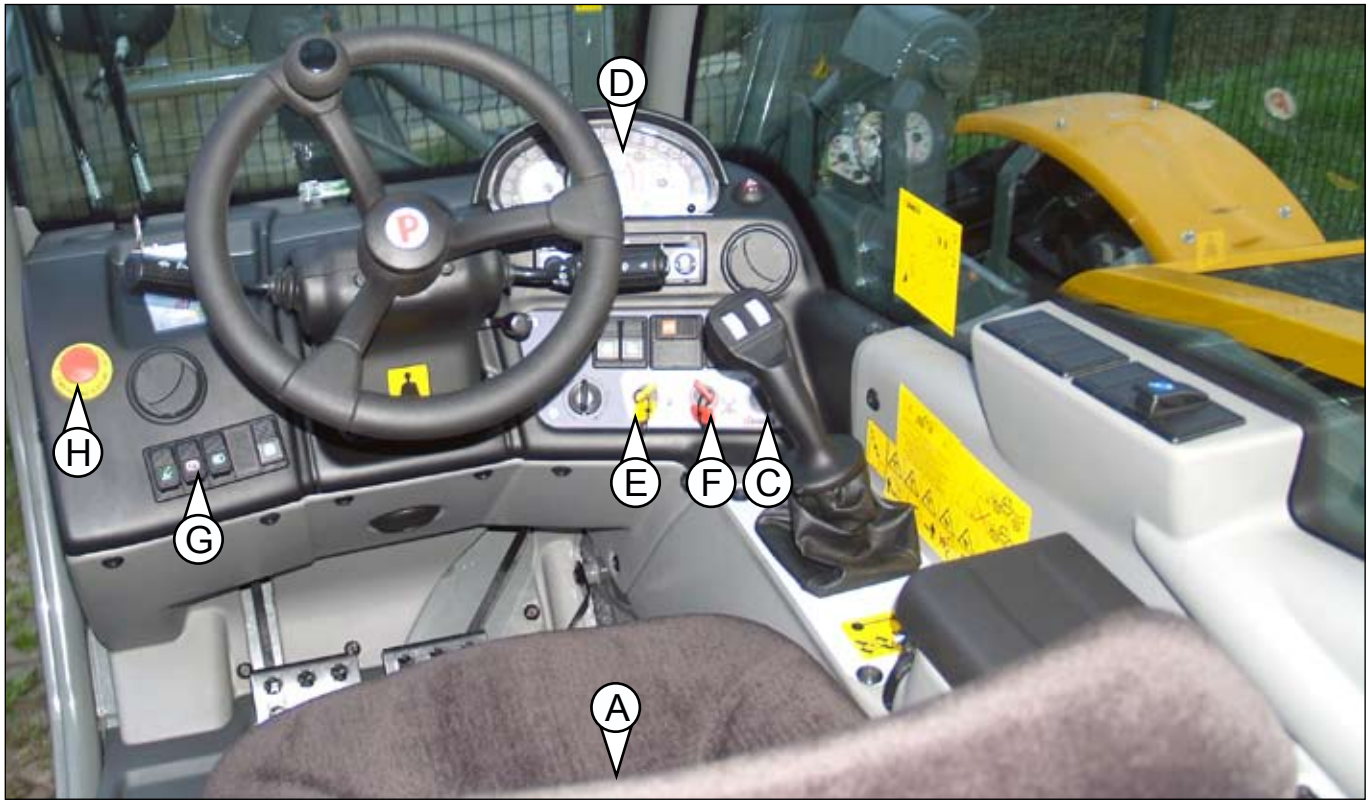

a
h
Support surface specifications
Foot of the escarpment
Distance "a" from the foot of the escarpment must adequate in terms of height "h" of the escarpment.
If the subsoil is good:
a : h = 1 : 1
In case of doubt:
a : h = 2 : 1

(fig. 5/B) Machine positioned on an escarpment

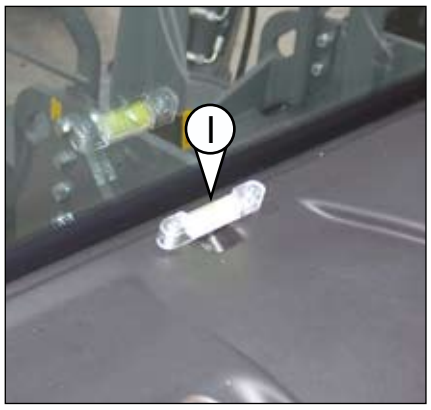
SAFETY DEVICES

The vehicle is equipped with certain safety devices (Proximity, Micro-switches, and Load monitoring devices) which safeguard its use from incorrect manoeuvres or from carelessness.

Safety device housing inside the cab



(fig.7/B)



(A) Seat micro switch (fig.7/B)

(B) Hand grip micro switch boom joystick (fig.7/B)

(C) Vehicle functions selector key (fig.7/B)

(D) Load monitoring system (fig.7/B)

(E) Anti-tipping device selector key (fig.7/B)

(F) Alarm return key selector anti-tipping device (fig.7/B)

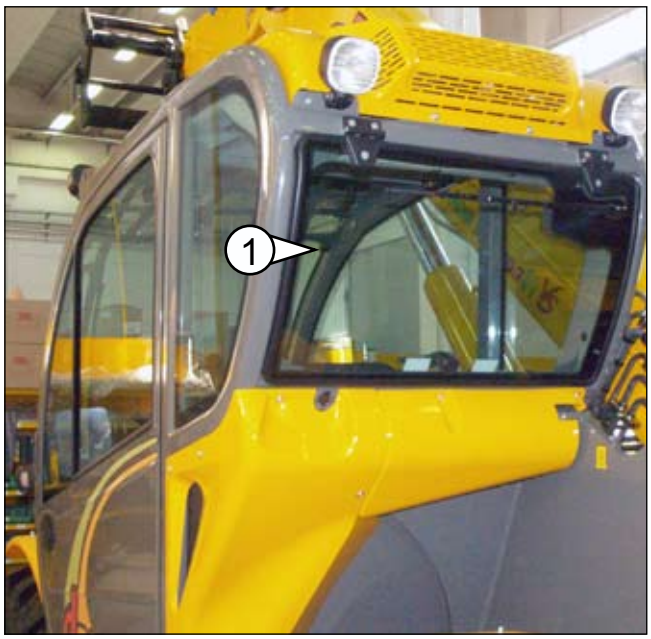
(G) Parking brake (fig.7/B)

(H) Mushroom-shaped emergency button (fig.7/B)

(I) Spirit level (fig.7/B)

Vehicle safety device housing

Cab emergency exit (REAR cab window).
(fig.8/B,pos."1")

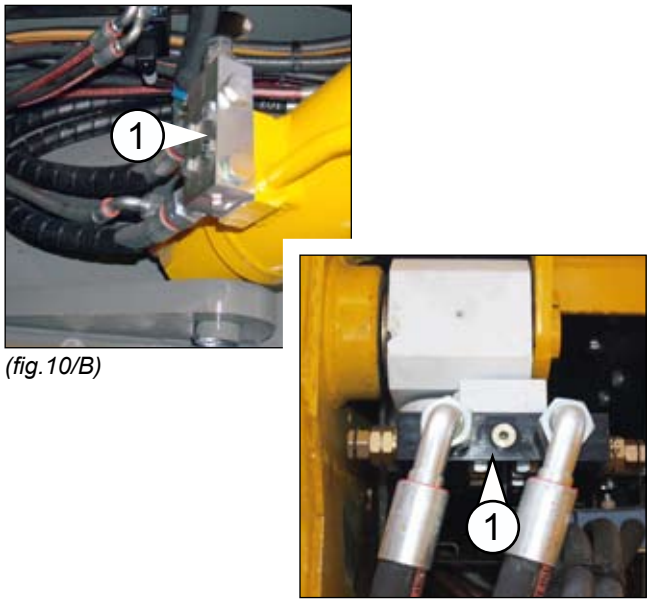


(fig.8/B)

Cab emergency exit (FRONT cab window).
(fig.9/B, pos."1")

(fig.9/B)

Valve block in all hydraulic cylinders.
(fig.10/B Pos."1")



(fig.10/B)

boom support spacer.
(fig.11/B Pos."1", fig.12/B)

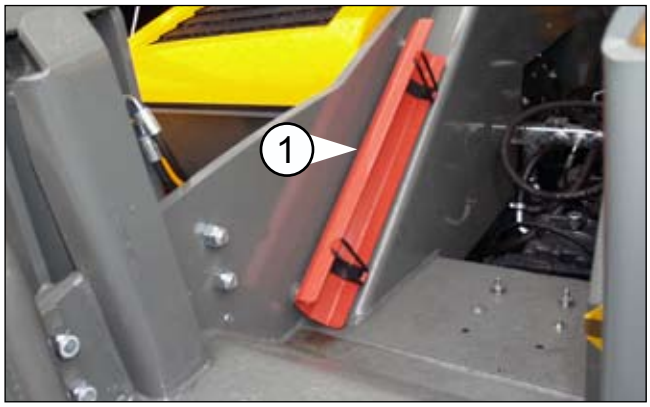
- ATTENTION:

The boom support spacer must only be used during routine maintenance operations. When carrying out maintenance work on the boom raising cylinder or on the related block valve, the boom must be supported by a suitable raising mechanism (Minimum capacity 3 tons).

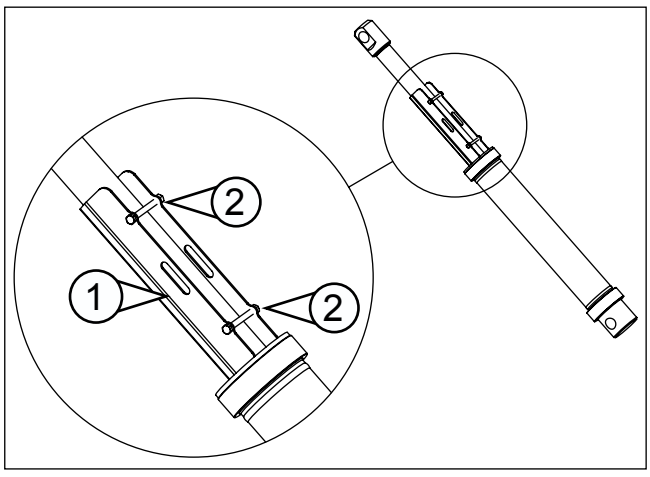
- ATTENTION:

To insert the spacer, proceed as follows:

- Completely close the boom extensions
- Raise the boom the minimum height necessary to mount the spacer to the rod;
- Lock the spacer (fig.12/B Pos."1") with the hooks (fig.12/B Pos."2").



(fig.11/B)



(fig.12/B)

DRIVER'S CAB

(fig.13/B Pos."1")

All vehicles are equipped with a driver cab that also acts as a safety cell for the operator.

- ATTENTION -

THE CAB IS A SAFETY COMPONENT AND THEREFORE MUST ALWAYS BE KEPT ACCORDING TO PROPER CONDITIONS FOR USE.

-PROHIBITED -

IT IS PROHIBITED to modify,
perforate or alter the cab structure in any way.
If the cab is tampered with the guarantee is automatically voided and the manufacturer is relieved of all liability.

- **DO NOT** weld or mechanically connect components to the cab's chassis.
- In case you need to replace attachment bolts, only use elements of the same class of resistance.
- Never connect chains or ropes to the cab for towing purposes.
- In the event of vehicle overturning, do not attempt to exit from the cab during the accident.

- ATTENTION -

REMAIN INSIDE THE CAB WITH SEAT-BELT FASTENED FOR BEST PROTECTION.

(fig.13/B)

ROPS-FOPS CAB

(fig.13/B - Pos. "1")

The vehicle is equipped with a ROPS and FOPS-approved cab. The operator is therefore protected against overturning and falling objects, as prescribed for traxcavators. During use, it is compulsory the use of safety seat belts to prevent the driver's impact with the cab inner structures. The rear window may be used as emergency exit. Opening the window completely during use of the vehicle **IS STRICTLY PROHIBITED**, due to possible shearing hazards between boom and chassis

- ATTENTION -

IF THE CAB SHOWS VISUAL DAMAGE, IT MUST BE REPLACED; CONTACT AN AUTHORISED SERVICE CENTRE OR AUTHORISED WORKSHOP OF *DIECI*.

LOAD TABLES

- ATTENTION -

CHECK THE LOAD TABLES FOR YOUR VEHICLE IN CHAPTER "H", TECHNICAL SHEETS

The Safe Working Load (SWL) of these vehicles depends on the extension and angle of the boom.

This vehicle is equipped with an anti-tipping device.

For further information on the **safe load indicator see** the relevant paragraph (in chapter "C" Getting to Know Your Vehicle, Anti-tipping device").

The load table located inside the cab illustrates the safe working capacities in relation to the various positions of the boom.
The boom extension is marked by letters: "A" "B" "C" "D", etc.

The load table illustrates the maximum height and extension achievable without exceeding the safe load. The telehandler is also equipped with its own load table. The load table is calculated with standard forks.
When certain attachments are fitted on the vehicle the further Load Tables are supplied.

The load table indicated is for reference purposes only.
Before lifting or positioning modes, consult the relative tables in the book at the side of the steering wheel, or consult chapter "h" (vehicle technical sheets) in this manual.

- ATTENTION -

The limits given in the load Tables refer to the vehicle at a halt. Do not lift or extend the boom when the vehicle is in motion. Retract the boom completely and lower it as far as possible before moving the vehicle with a load.
Check which boom attachment has been mounted on the vehicle and then consult the relevant load table.

USING THE LOAD TABLES AND BOOM INDICATORS

- ATTENTION -

For your safety and the safety of the vehicle, follow information described below.

- ATTENTION -

The limits indicated in the load tables refer to the stopped vehicle on wheels or outriggers (if present) on levelled, solid ground.

Do not lift or extend the boom when the vehicle is in motion.

Retract the boom completely and lower it as far as possible before moving the vehicle with a load.

Check which boom attachment has been mounted on the vehicle and then consult the relevant load table.

Before proceeding to lift or put down a load, it is essential that you know how much it weighs.

Make sure the centre of gravity of the load does not exceed 500 mm measured from the heels of the forks.

- ATTENTION -

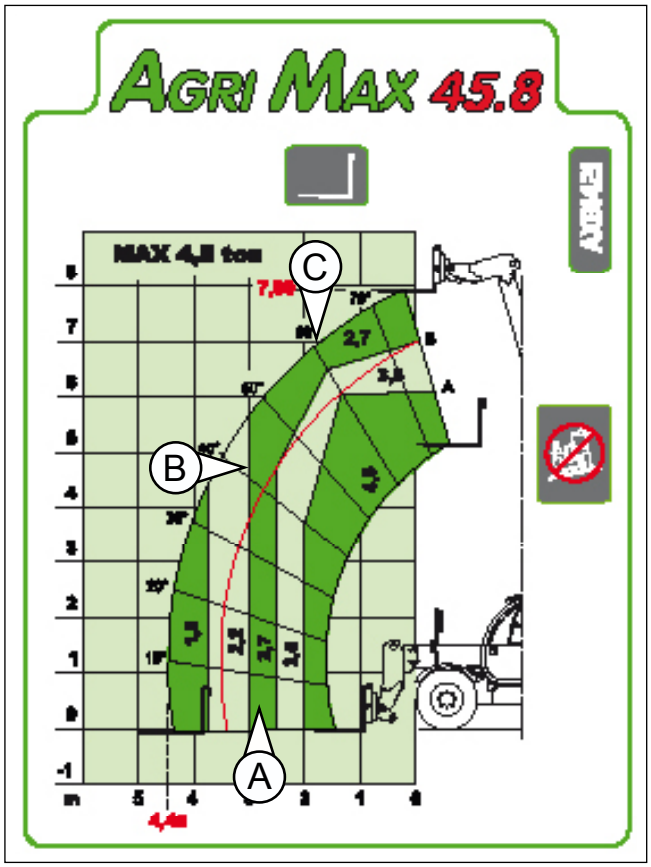
The centre of gravity of the load may not necessarily be at the centre, you have to therefore work out its position.

When the weight to be handled is known, consult the load table (chapter “h“ vehicle technical sheets) and identify the section indicating the weight immediately above.

Example:
in the load table given as an example (fig.15/B), the weight of the load is 2,5 tons; go to the section with the 2,7 tons. (fig.15/B Pos.“A“).

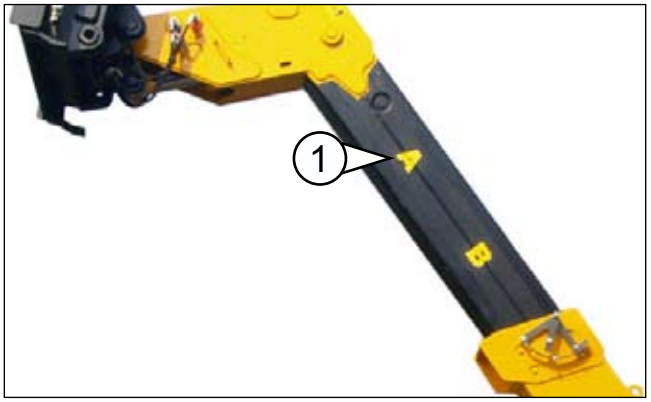
The left-hand border (fig.15/B Pos.“B“) and the upper border (fig.15/B Pos.“C“) of this segment indicate the stability limits of the vehicle relative to the considered load. Do not slant or extend the boom beyond the indicated limits. (fig.15/B Pos.“B-C“).

After insertion of forks from under the load and before lifting them, check indicator values of boom angle (fig.16/B Pos.“1“) and extension (fig.17/B Pos.“1“).



(fig.15/B)

(fig.16/B)



(fig.17/B)

As seen on the table, the lines start from the graduated scale for the angling and extension of the boom and cross the section of the table. Check where the relevant lines for the parameters considered cross. If the cross point is within the maximum load section or to the right (known load weight), the load is within the safety limits.

If the lines cross above or to the left of the section, do not make any attempt to lift the load. Retract the boom.
If, even with the boom completely retracted, the angular and extension values of the boom intersect outside of the maximum load section, do not attempt to lift the load.

When the load is on the forks, retract the boom before lifting or lowering it. This will reduce the risk of the vehicle becoming unstable.

When the load is raised (for example, on a scaffolding) it should be let go (raise it) before retracting the boom completely.

Before depositing a load, check the load table to determine the maximum distance of the vehicle from the point of unloading. It should be possible to deposit the load without intersecting the limits indicated to the left or above the maximum load section.

Note-book with essential data
(Fig.18/B - Pos."1")

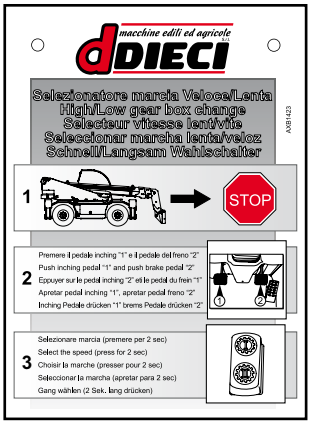
- A : cover page
- B : gear change page
- C : tyre inflation pressure page
- D : main safety regulation page
- E : driving on roads page
- F : symbol key (front)
- G : symbol key (back)
- H : load charts

- ATTENTION -

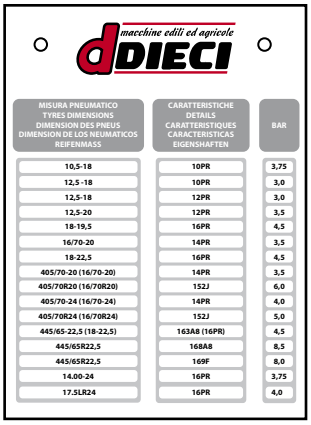
Tables illustrated are only an indication and may not correspond to those found inside the note pad in the cab.

(fig.18/B)

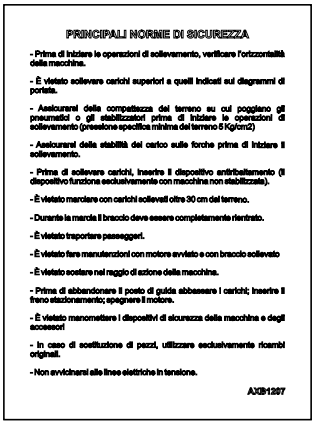
A : cover


Selezionatore marcia Veloce/Lenta
High/Low gear box change
Selecteur vitesse lent/vite
Seleccionar marcha lenta/veloz
Schnell/Langsam Wahlschalter
STOP
Select the speed (press for 2 sec)
Choisir la marche (presser pour 2 sec)
Seleccionar la marcha (apretar para 2 sec)
Gang wählen (2 Sek. lang drücken)

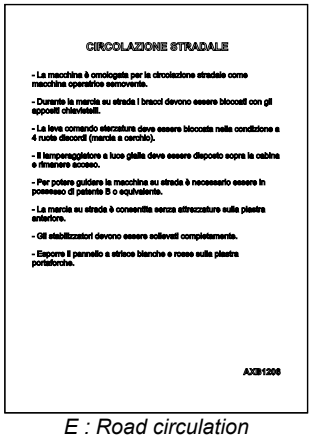
B: speed selection



C: tyre inflation pressure

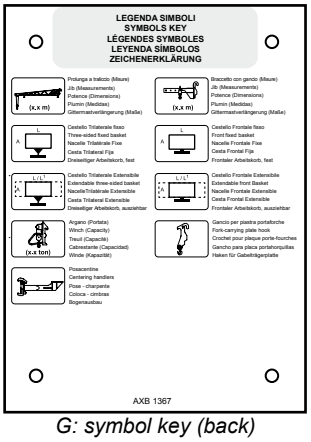

PRINCIPALI NORME DI SICUREZZA
- Prima di iniziare le operazioni di sollevamento, verificare l'orizzontalità della macchina.
- È vietato sollevare carichi superiori a quelli indicati sui diagrammi di portata.
- Assicurarsi della compattezza del terreno su cui poggiano gli pneumatici o gli stabilizzatori prima di iniziare le operazioni di sollevamento (pressione specifica minima del terreno 5 Kg/cm2)
- Assicurarsi della stabilità del carico sulle forche prima di iniziare il sollevamento.
- Prima di sollevare carichi, inserire il dispositivo antiribaltamento (il dispositivo funziona esclusivamente con macchina non stabilizzata).
- È vietato marciare con carichi sollevati oltre 30 cm dal terreno.
- Durante la marcia il braccio deve essere completamente rientrato.
- È vietato trasportare passeggeri.
- È vietato fare manutenzioni con motore avviato e con braccio sollevato
- È vietato sostare nel raggio di azione della macchina.
- Prima di abbandonare il posto di guida abbassare i carichi; inserire il freno stazionamento; spegnere il motore.
- È vietato manomettere i dispositivi di sicurezza della macchina e degli accessori
- In caso di sostituzione di pezzi, utilizzare esclusivamente ricambi originali.
- Non avvicinarsi alle linee elettriche in tensione.
AXB1207

D: main safety regulations

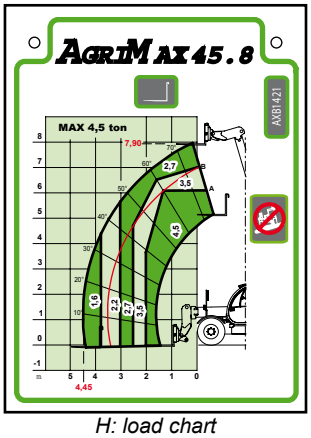

CIRCOLAZIONE STRADALE
- La macchina è omologata per la circolazione stradale come macchina operatrice semovente.
- Durante la marcia su strada i bracci devono essere bloccati con gli appositi chiavistelli.
- La leva comando sterzature deve essere bloccata nella condizione a 4 ruote discordi (marcia a cerchio).
- Il lampeggiatore a luce gialla deve essere disposto sopra la cabina e rimanere acceso.
- Per potere guidare la macchina su strada è necessario essere in possesso di patente B o equivalente.
- La marcia su strada è consentita senza stabilizzare sulla piastra anteriore.
- Gli stabilizzatori devono essere sollevati completamente.
- Esporre il pannello a strisce bianche e rosse sulla piastra portaforche.
AXB1206

E : Road circulation

F: symbol key



G: symbol key (back)



H: load chart

macchine edili ed agricole
DIECI

LOAD HANDLING

Picking a load up from the ground

1. Slowly approach the load to be lifted with the boom completely retracted and the forks horizontally positioned at the height of the lifting position.
   Keep forks raised just enough to avoid contact with the ground.

2. Bring forks under load to be lifted until contact is made with the fork holding plate. Engage the parking brake and move the gear selector to neutral.

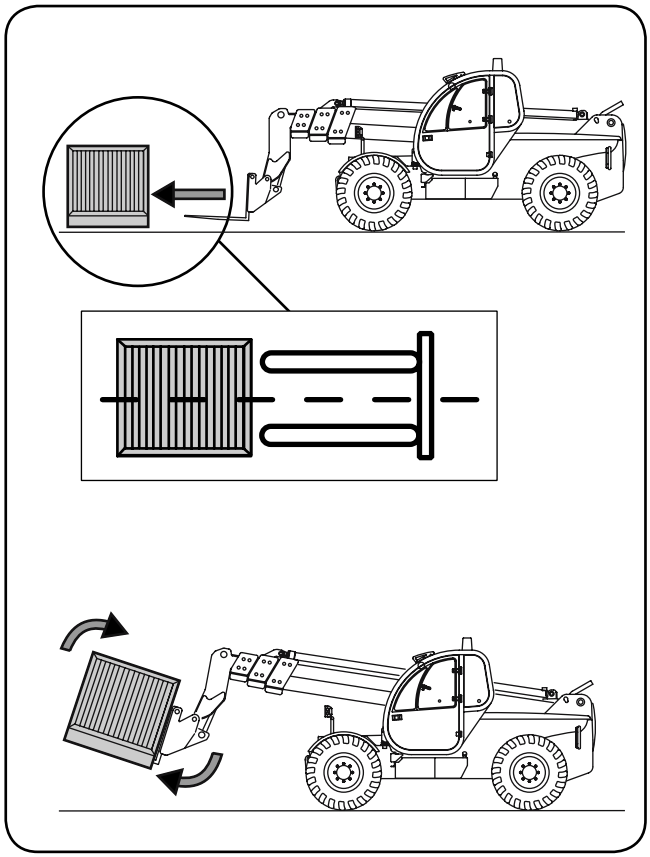
3. Slightly lift up the load and tilt the fork holding plate backwards, bringing it to the transport position.

- ATTENTION -

Always respect the load's centre of gravity, slant the forks just enough to ensure stability and prevent load loss during braking.

- ATTENTION -

Never transport a load with the boom raised and/or extended



Lifting loads from high up

1. Ensure the forks can be easily inserted under the load.
2. Slowly and cautiously drive the machine perpendicularly towards the load with horizontal forks.
3. Always remember to maintain the distance necessary to insert the forks under the load between the pile and the machine. Extend the boom over the shortest possible length.
4. After inserting the forks under the load so that contact is made with the fork holder plate, engage the parking brake and shift the gear selector to neutral.
5. Raise the load slightly and tilt the fork holder plate backwards into the carrying position.
6. If possible, lower the load without moving the machine. Raise the boom to distance the load, then retract the extensions and position the load in the carrying position.
7. If it is not possible to reverse the machine very slowly and with the utmost care, after adequately distancing the load, retract the extensions and lower the boom to position the load in the carrying position.

- CAUTION -

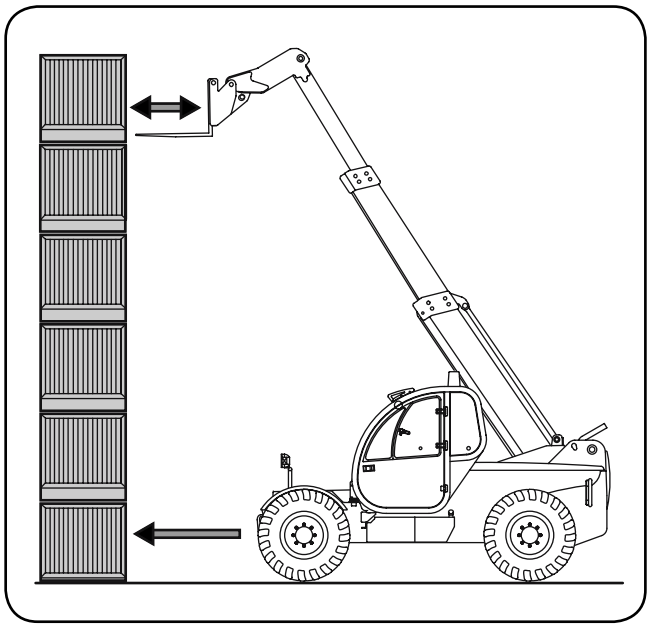
Always comply with the centre of gravity of the load, tilt the forks enough to ensure stability and to avoid dropping the load when braking.

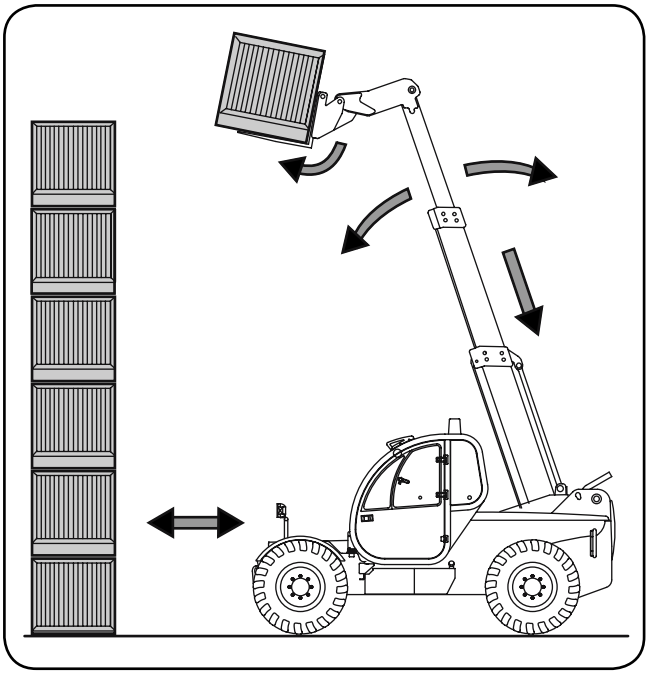
- PROHIBITION -

IT IS STRICTLY FORBIDDEN TO PICK UP A LOAD IF THE MACHINE IS NOT LEVEL.

- CAUTION -

Never carry loads while the boom is raised and/or extended.





Placing loads in high places

1. Place the load in the carrying position in front of the pile.
2. Raise and extend the boom until the load is above the pile. If necessary, advance the machine towards the pile very slowly and with the utmost care.
3. Engage the parking brake and shift the gear selector to neutral,
4. Position the load horizontally and place on top of the pile, lower and retract the extensions to position the load correctly.
5. Release the forks by alternately retracting the extensions and raising the boom; if possible reverse the machine very slowly and with the utmost care.

- CAUTION -

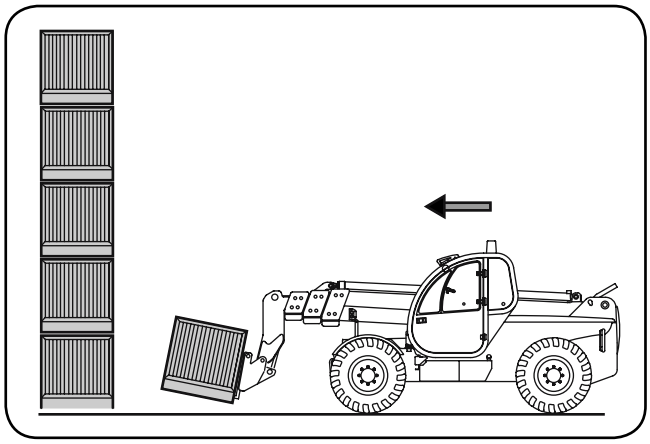
Always comply with the centre of gravity of the load, tilt the forks enough to ensure stability and to avoid dropping the load when braking.

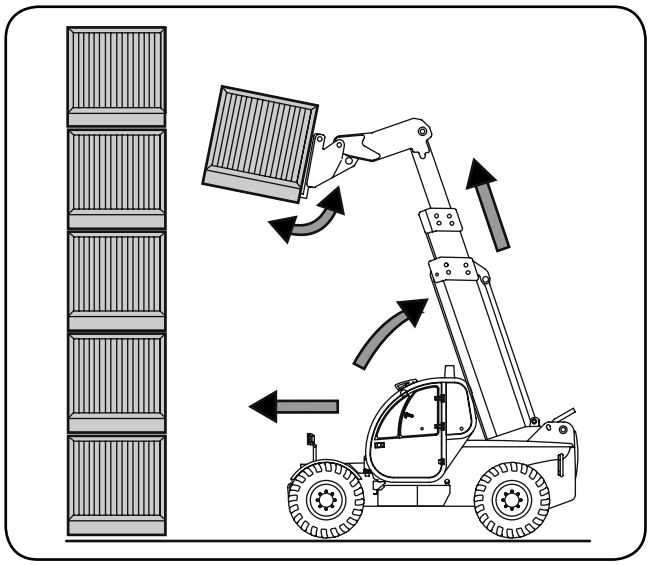
- PROHIBITION -

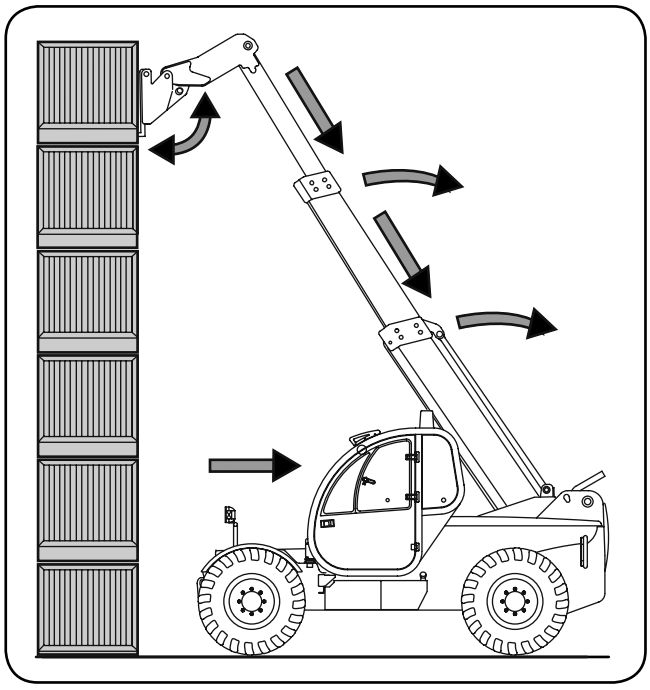
IT IS STRICTLY FORBIDDEN TO PICK UP A LOAD IF THE MACHINE IS NOT LEVEL.

- CAUTION -

Never carry loads while the boom is raised and/or extended.

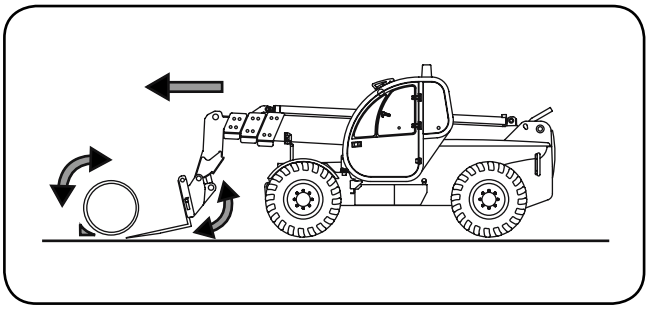






Picking up round-shaped loads

- Tilt the forks forward and detract the telescopic boom. At the same time, place the forks under the load, and turn the fork holding plate backwards in order to slide the load. If necessary, secure the load with wedges.



- ATTENTION -

Always respect the load's centre of gravity, slant the forks just enough to ensure stability and prevent load loss during braking.

- ATTENTION -

Never transport a load with the boom raised and/or extended

SAFETY STICKERS

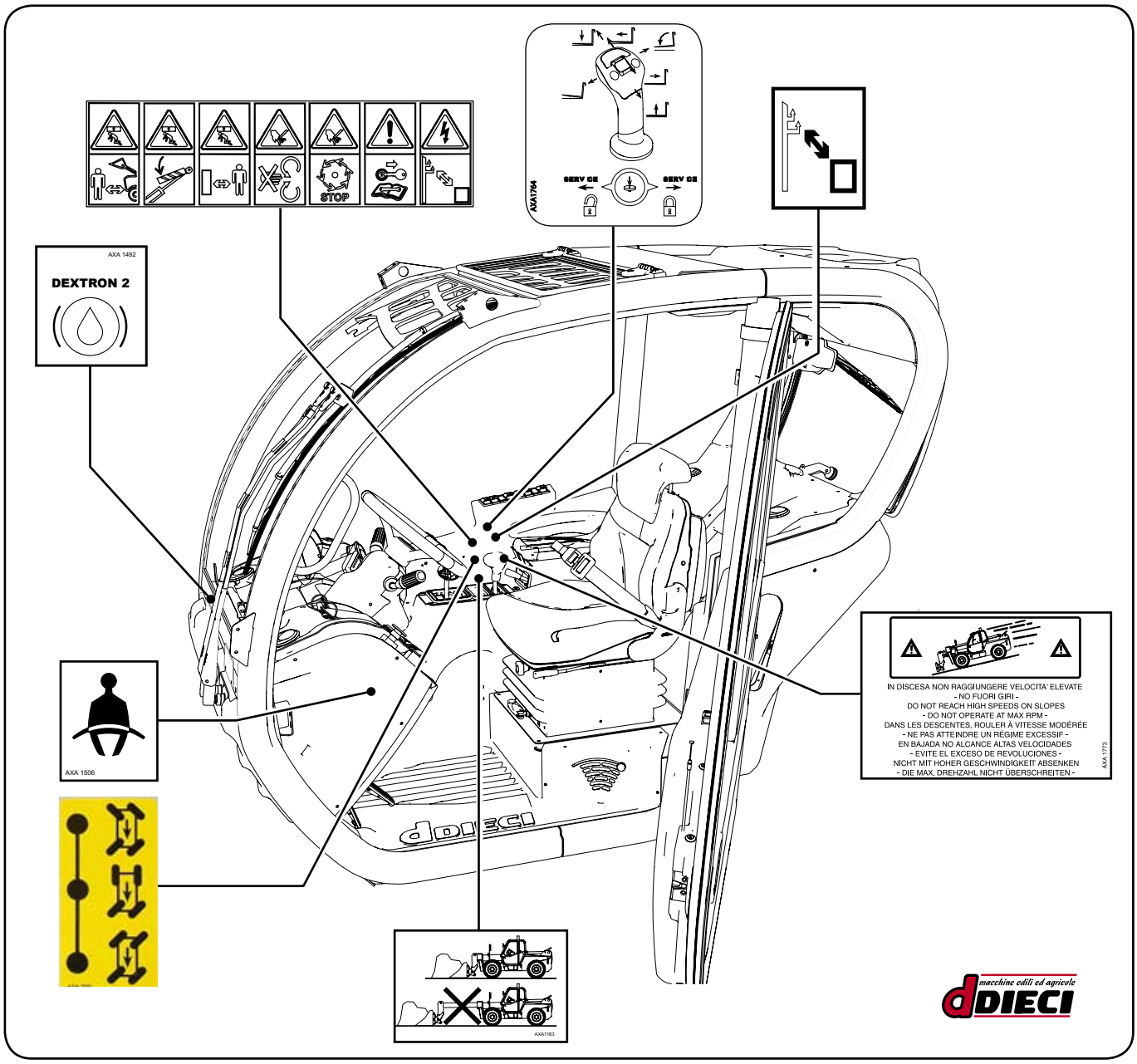
Safety stickers have been applied to the machine in the indicated positions. The aim of the safety stickers is to provide a guide for your and others' safety. Before using the machine, check the contents and position of the stickers by walking around the machine with this manual in your hands. Re-examine the stickers with every operator who is to use the machine.

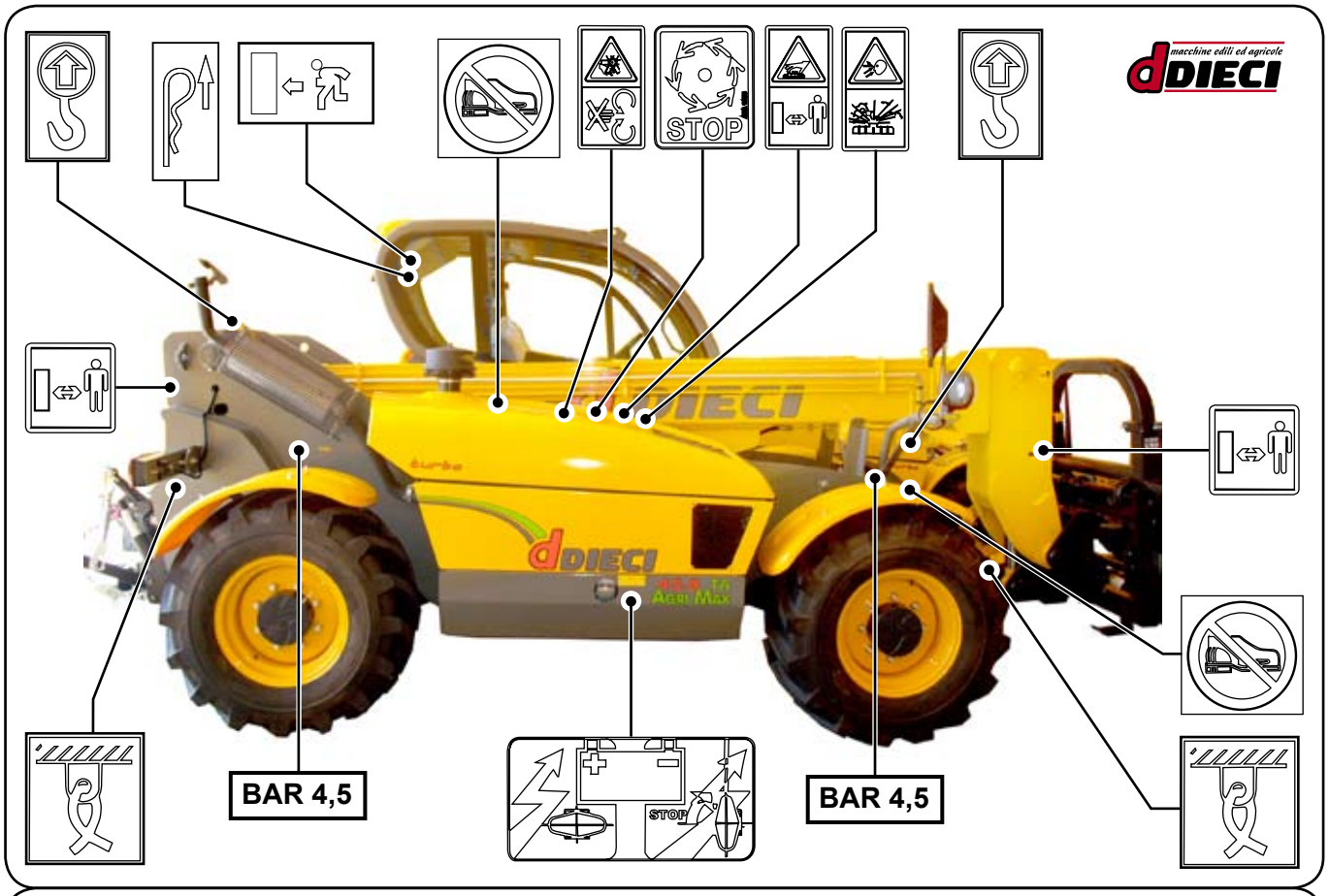
- Ensure you fully acknowledge where they are located and understand their contents.

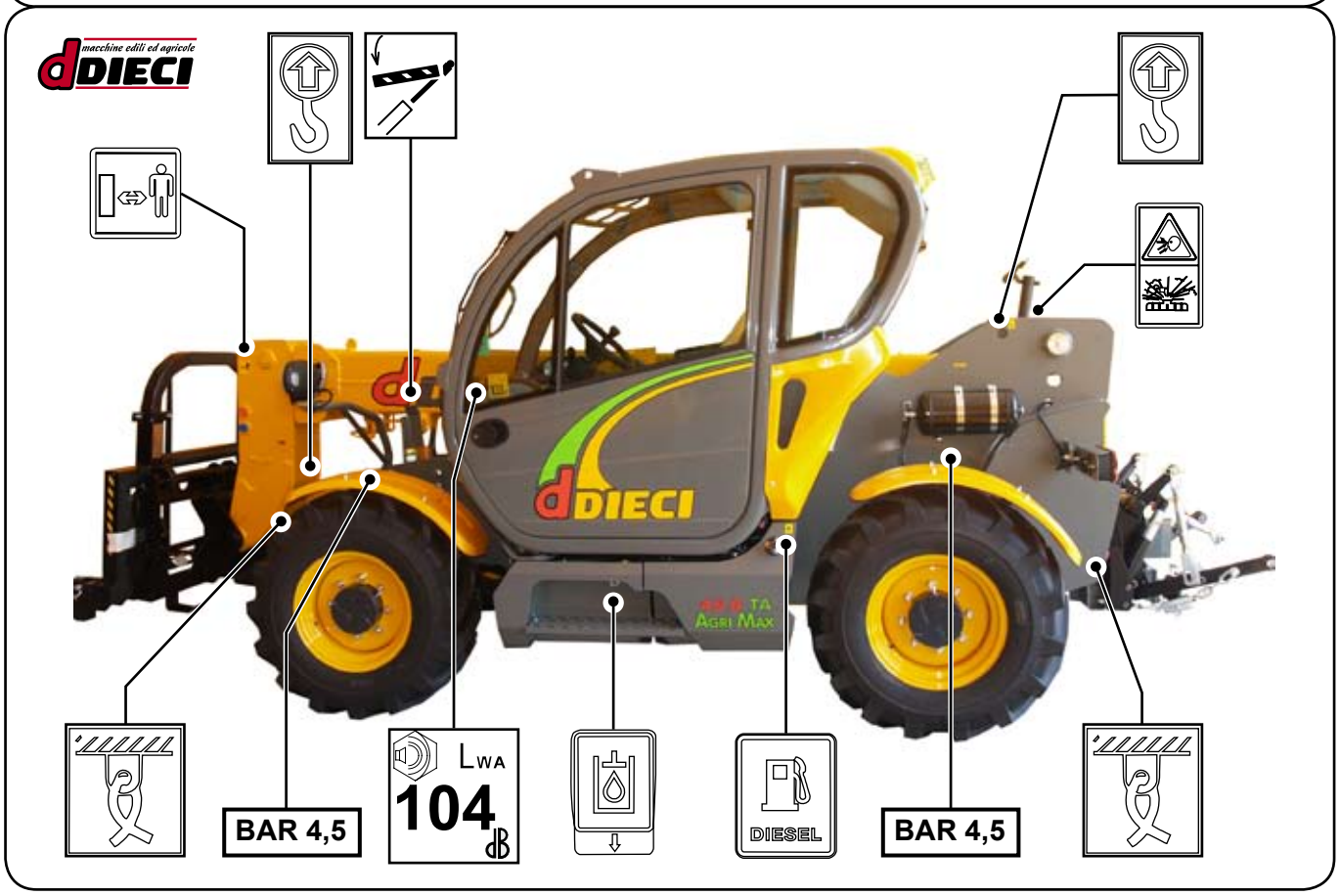
- To ensure the stickers are easy to read and comprehend, check they are in the correct position and that they are always kept clean. **IT IS STRICTLY FORBIDDEN** to clean the signs on the machine with solvents or petrol; the stickers may become unstuck. Additional stickers to the warning and safety stickers must always be treated in the same way.

- If the stickers deteriorate, become damaged or are lost, replace them because they must be legible and understood correctly. Orders for stickers must be placed using the same process as for spare parts (ensure you include the model and serial number of the machine when you place your order).

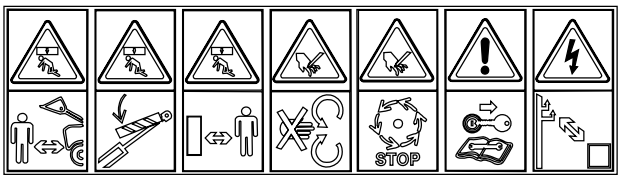
- In case of doubt, please consult your agent or dealer.


AXA1764
SERV CE
SERV CE
STOP
AXA 1492
DEXTRON 2
AXA 1506
IN DISCESA NON RAGGIUNGERE VELOCITA' ELEVATE
- NO FUORI GIRI -
DO NOT REACH HIGH SPEEDS ON SLOPES
- DO NOT OPERATE AT MAX RPM -
DANS LES DESCENTES, ROULER À VITESSE MODÉRÉE
- NE PAS ATTEINDRE UN RÉGIME EXCESSIF -
EN BAJADA NO ALCANCE ALTAS VELOCIDADES
- EVITE EL EXCESO DE REVOLUCIONES -
NICHT MIT HOHER GESCHWINDIGKEIT ABSENKEN
- DIE MAX. DREHZAHL NICHT ÜBERSCHREITEN -
AXA 1773
AXA1163


STOP
BAR 4,5
BAR 4,5
STOP


LWA
104
dB
BAR 4,5
DIESEL
BAR 4,5

safety stickers and their location



(fig.28/B)

- **Located in the cab on the right hand side window** (fig.28/B):

- DANGER:
Keep all persons at a safe distance from the vehicle when starting loading operations.

- DANGER:
When carrying out maintenance work, block all hydraulic cylinders using safety locks.

- DANGER:
Keep all persons at a safe distance.

- DANGER:
Do not open or remove the safety panels while the engine is running.

- DANGER:
Wait until all moving parts have come to a halt.

- DANGER:
Switch off the engine and remove the key before starting maintenance work.

- DANGER:
Check the work zone and keep far away from power supplies.

- **On the engine compartment radiator**(fig.29/B)

- DANGER:
Steam and hot water under high pressure. Protect the face. Remove the cap with due caution.

On the side of the intercooler radiator (fig.30/B)

(fig.29/B)

(fig.30/B)

- DANGER:
Risk of burns.

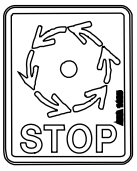
- DANGER:
Keep all persons at a safe distance.

- **On the side of the intercooler radiator** (fig.31/B)

- DANGER:
Do not open or remove the safety panels while the engine is running.

- DANGER:
Wait until all moving parts have come to a halt.

(fig.31B)



(fig.32/B)

- **On the side of the intercooler radiator** (fig.32/B)

- DANGER:
Do not open; wait until all moving parts have come to a stop.

Stickers for use and maintenance

- **On the rear window** (fig.34/B)

Indicates the direction of clip extraction hindering total opening of the window

- **On the rear window** (fig.35/B)

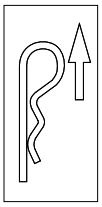
Indicates the emergency exit

- **Under the steering wheel** (fig.36/B)

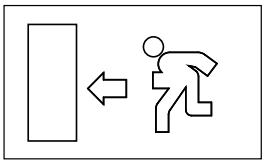
Indicates the obligation to fasten seat-belts when using the vehicle.

- **On the side of the brake oil tank** (fig.37/B)

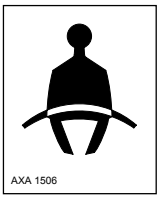
Indicates the type of oil used in the brake system.



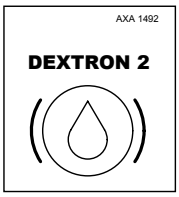
(fig.34/B)



(fig.35/B)



(fig.36/B)



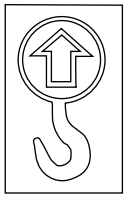
(fig.37/B)

- **On the chassis** (fig.38/B)

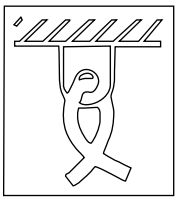
Shows the 4 places where the vehicle can be anchored if it should need to be lifted.

- **Under the chassis** (fig.39/B)

Shows the 4 places where the vehicle can be towed or anchored for transportation.



(fig.38/B)



(fig.39/B)

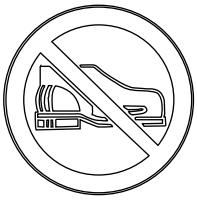
- **On the parts not to be stepped on** (fig.40/B)

⚠ ***- DANGER:***

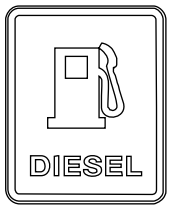
Keep off "danger of breakage".

- **On the fuel tank** (fig.41/B)

Type of fuel to be used.



(fig.40/B)



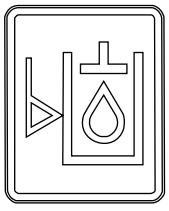
(fig.41/B)

- **On the side of the hydraulic oil tank** (fig.42/B)

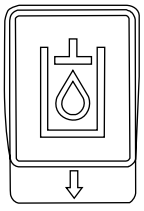
Indicator for hydraulic oil level.

- **On the side of the hydraulic oil tank** (fig.43/B)

Marks the cap to top up the hydraulic oil.

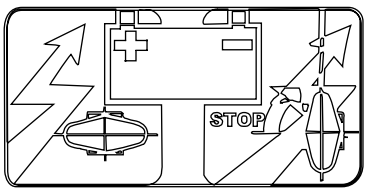


(fig.42/B)



(fig.43/B)

- **Outside the engine bonnet** (fig.44/B)



(fig.44/B)

(fig.45/B)

- **On the 4 fenders** (fig.45/B)

Indicates the recommended tyre pressure.

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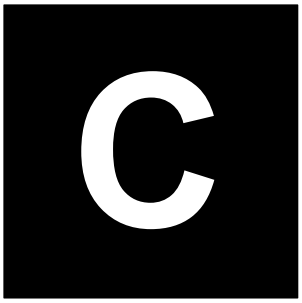
GETTING TO KNOW AND USING THE VEHICLE



EVERY MODIFICATION MADE TO THE VEHICLE LEADS TO A NEW VERIFICATION OF CONFORMITY WITH THE 2006/42 MACHINERY DIRECTIVE "CE" THIS PROCEDURE IS ALSO VALID IN THE CASE OF REPAIRS WITH NON-ORIGINAL SPARE PARTS.

IT IS PROHIBITED TO OPERATE IF THIS MANUAL HAS NOT BEEN READ AND UNDERSTOOD.

THE OPERATOR IS REQUIRED TO LEARN THE LOCATION AND FUNCTION OF ALL INSTRUMENTS AND CONTROLS, INDEPENDENT OF HIS OR HER EXPERIENCE IN THE FIELD, BEFORE OPERATING THE VEHICLE.

THE IMAGES, DESCRIPTIONS, MEASUREMENTS, GIVEN IN THIS CHAPTER REFER TO STANDARD VEHICLES.

YOUR VEHICLE CAN BE SET-UP WITH OPTIONAL CONTROLS AND ACCESSORIES ON REQUEST.

ALL FUNCTIONS, PROCEDURES, INHERENT THE USE AND SET-UP OF VEHICLE EQUIPMENT, NOT DESCRIBED IN THIS MANUAL, ARE PROHIBITED.

USE OF THE VEHICLE DIFFERENT TO THAT DESCRIBED IN THIS MANUAL IS PROHIBITED.

IT IS MANDATORY TO HAVE READ AND LEARNED CHAPTER "B" (SAFETY STANDARDS) BEFORE READING CHAPTER "C" AND USING THE VEHICLE.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

GENERAL WARNINGS

- ATTENTION:

The operator must only operate vehicle and its commands when properly seated in the driver's seat.

- ATTENTION:

The telehandler described in this manual cannot be used in closed spaces or anywhere where there might be explosive gases. To operate in closed spaces, the Manufacturer must be contacted so that the necessary modifications can be made to the vehicle.

- ATTENTION:

Working on a slope may be dangerous. The conditions of the terrain may vary according to climatic conditions (e.g. rain, snow, ice). Therefore, pay careful attention to the conditions of the terrain on which the vehicle is being used; the use of low speeds is recommended.

- ATTENTION:

When transporting a load on a gradient, the load should be kept up gradient with respect to the vehicle in order to increase its stability. Before mounting ramps or trailers with the vehicle, remove any mud, ice or oil which may cause accidents.

- ATTENTION:

Proceed with due caution on loose, wet or muddy surfaces.

- ATTENTION:

Lack of efficient or clear communication may cause serious accidents. If you are working with others, make sure any hand signals you intend to use are understood by everybody. Since work sites are often very noisy, do not rely on verbal communication.

- PROHIBITION:

IT IS PROHIBITED to use the vehicle's moveable hydraulic parts to lift people, with exception of the uses for which the vehicle is intended.

- ATTENTION:

Before operating the moveable hydraulic parts of the vehicle, ensure the surrounding area is clear.

- ATTENTION:

The vehicle should be used exclusively by competent, authorised personnel who have thoroughly read this manual. If the vehicle is to be used on roads, the operator must have a valid, category B driver's license, or higher in accordance with Italian law.

- ATTENTION:

Do not use the vehicle if you are under the effect of alcohol, drugs or if you have taken medication that may make you drowsy or alter your reflexes.

- ATTENTION:

Before operating the vehicle or before carrying out complicated or dangerous manoeuvres, it is essential that you practice in an empty, unobstructed part of the site.

- ATTENTION:

Clear, simple symbols are located near all controls for convenience purposes and to make them easier to understand for the operator.

- ATTENTION:

When diagonal steering has been selected, always proceed at a low speed.

- ATTENTION:

Should any potentially hazardous parts be damaged, stop the vehicle immediately. Do not resume operation of the vehicle until the problem has been resolved.

- ATTENTION:

Tyres which are over inflated or overheated may explode: Follow the instructions provided in this manual for correct tyre inflation. Do not weld or cut the rims; repair work should only be carried out by a qualified tyre repair shop.

- ATTENTION:

The boom should not be left raised for an extended period of time. This may cause the displacement of boom extensions; retract extensions at least once a day.

IDENTIFYING VEHICLE PARTS

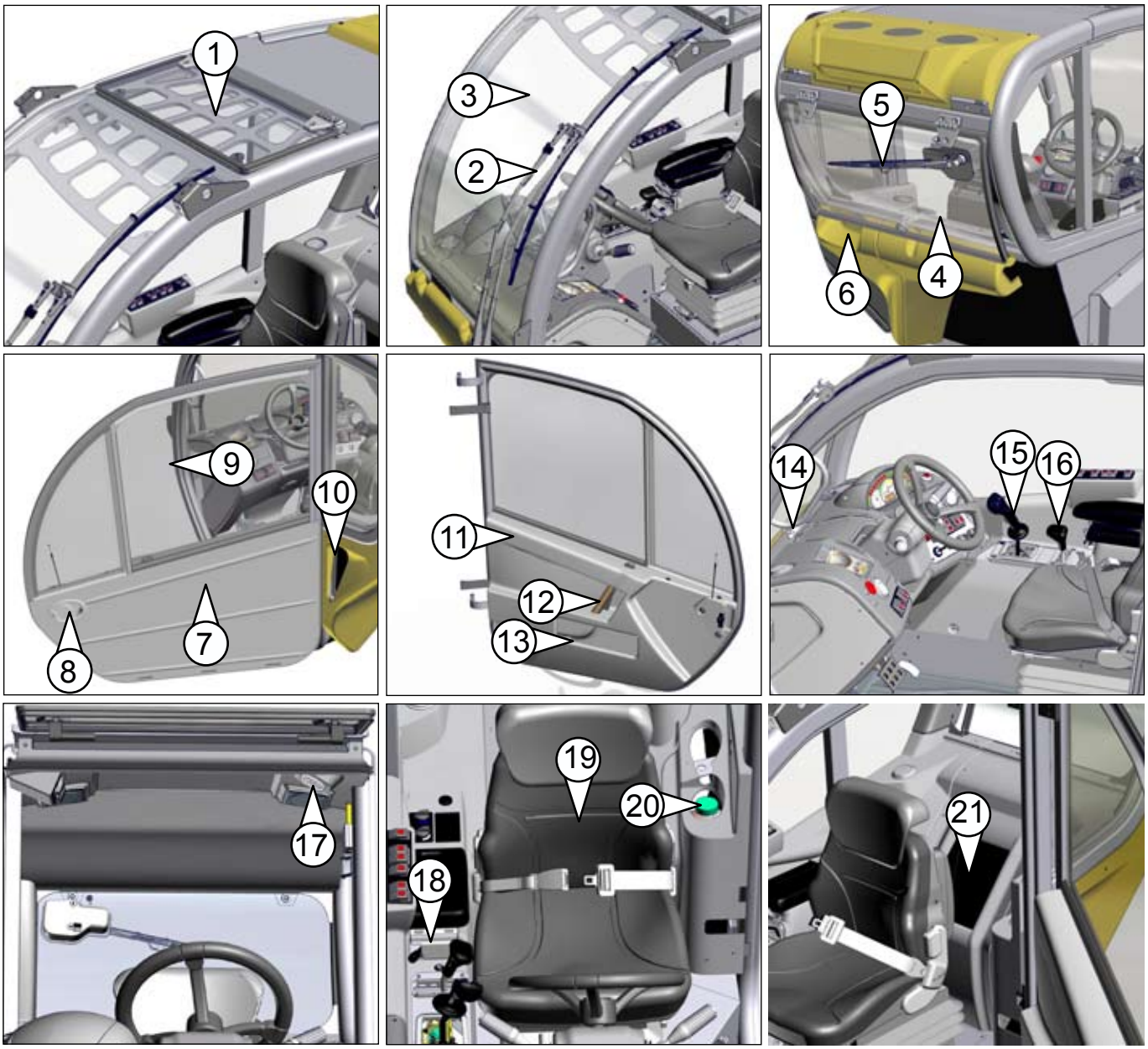
Right side of vehicle

1. Cab
2. Telescopic boom
3. Right rear view mirror
4. Right front light
5. Attachment holding plate
6. Epicycloidal reduction gear
7. Wheel
8. Engine bonnet
9. Right rear light

Left side of vehicle

1. Cab
2. Left rear light
3. Epicycloidal reduction gear
4. Fuel tank
5. Wheel
6. Cab steps
7. Attachment holding plate
8. Left front light
9. Telescopic boom
10. Left rear view mirror.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.



Cab components

1. Upper roof.
2. Front windscreen wipers.
3. Front window.
4. Rear window / emergency exit.
5. Rear windscreen wiper.
6. Revolving light outlet.
7. Cab door /external view)
8. External opening/closure handle
9. Door upper window.
10. Cab internal ventilation intake
11. Cab door (internal view)
12. Door opening/closure handle
13. Courtesy compartment
14. Spirit level
15. Boom movements joystick
16. Attachment control joystick (if present)
17. Ceiling lighting inside cab.
18. Steering selection lever
19. Seat
20. Windscreen washer liquid tank.
21. Technical documentation pocket

GETTING IN AND OUT OF THE DRIVER'S CAB

Before entering the cab, make sure that your hands and shoes are clean and dry to prevent slipping and falling. Only use the handles provided (fig.1/C Pos."1", "2", "3","4") to climb into the cab; do not use controls or steering wheel located on the inside. Always face the cab when getting in or out of the vehicle

- ATTENTION:

Only get in and out of the cab when the vehicle is stopped and the parking brake is engaged. Do not carry out maintenance on a moving vehicle.

- ATTENTION:

The "4" ascent step(fig.1/C) is only present in models with high cab.

(fig.1/C)

DOOR OPENING CONTROLS

The cab door is equipped with an external locking handle (fig.2/C Pos."1").

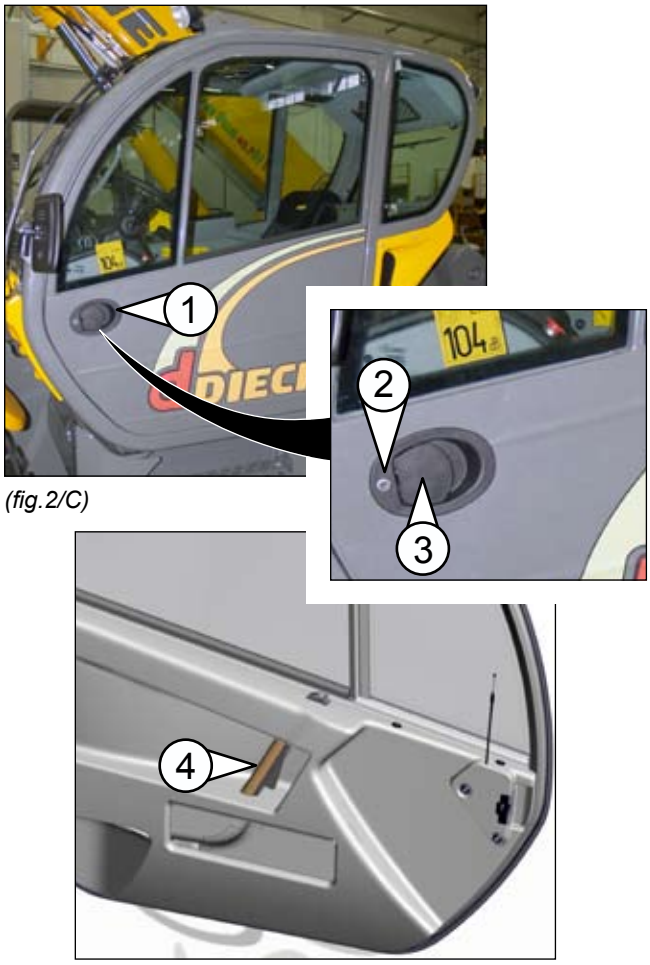
To open the door:

- Insert the key into the lock (fig.2/C Pos."2") and turn clockwise/anti-clockwise to engage/disengage the lock.
- Pull the handle (fig.2/C Pos."3") toward you to unhook the door with the lock disengaged.

NOTE:
The door will not open if the door handle is pushed when the lock is engaged.

- PROHIBITED -

IT IS PROHIBITED
to operate with the vehicle when the cab door is open.



(fig.2/C)

INTERNAL DOOR OPENING CONTROLS

- Press the button on the handle to release the door (fig.2/C Pos."4").
- Push the door outwards to complete opening.

- ATTENTION:

Before pushing the door outward, make sure that the surrounding area is free of obstacles. Accompany the door with hand when opening.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

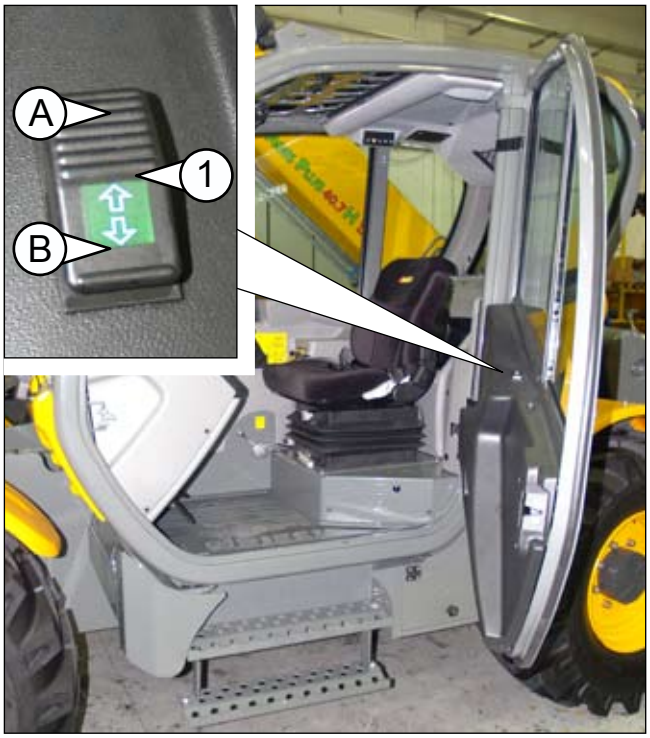
OPENING THE DOOR WINDOW
(fig.3/C Pos.”1”)

- Press the selector switch in “A” (fig.3/C) to lower the glass.

- Press the selector switch in “B” (fig.3/C) to raise the glass.

- ATTENTION:

Before opening or closing the window, verify that the surrounding area is free of obstacles.



(fig.3/C)

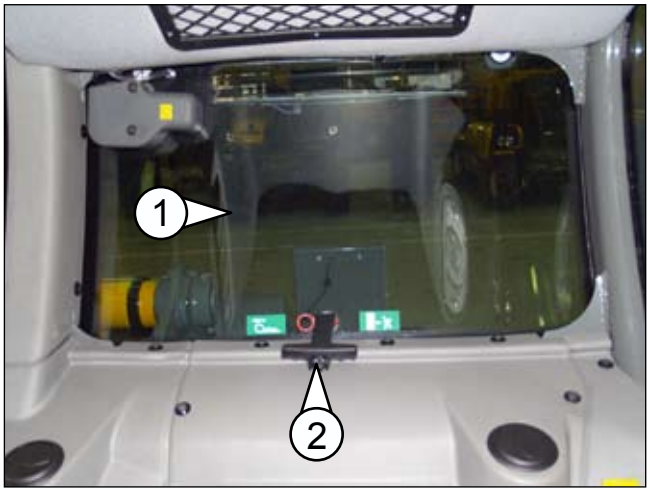
REAR WINDOW
(fig.4/C Pos.”1”)

- Turn the handle to open (fig.14/C Pos.”2”) and push the window outward.

The window will remain in the open position by the handle itself.

- ATTENTION:

In the event the handle no longer blocks the window in the open position, replace it as soon as possible; risk of crushing.



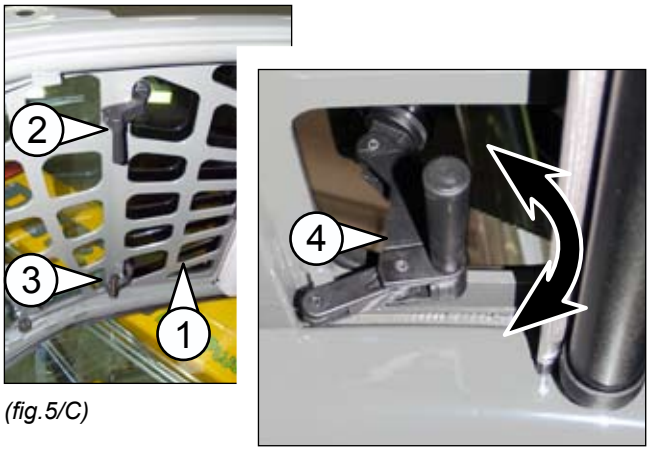
(fig.4/C)

UPPER ROOF.
(fig.5/C Pos.”1”)

To open the roof, grip the handles (fig.5/C Pos.”2” and “3”) and push them up using a circular motion (fig.5/C Pos.”4”). The rotated handles will hold the window open. Do the opposite to close the roof.

- ATTENTION:

In the event the handles should not hold the window open, replace them as soon as possible; risk of crushing.



(fig.5/C)

REAR EMERGENCY EXIT

(Fig.6/C pos."1")

The emergency exit is identified and marked on the rear window.

- In case the window must be opened completely, slide out the locking pin (fig.6 /C Pos."2") and push the window outward.

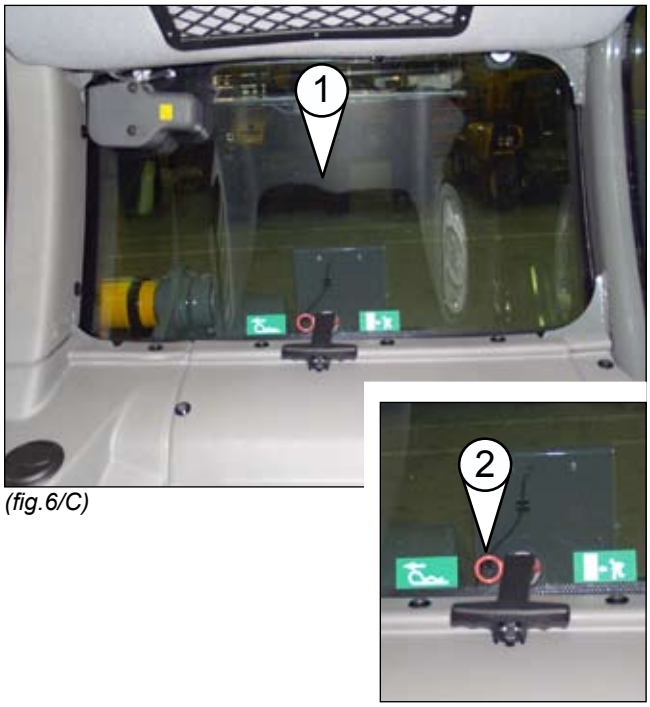
The pin must be kept in position as shown during normal working operations.

***- PROHIBITION*:**

Opening the window completely during use of the vehicle **IS STRICTLY PROHIBITED**, due to possible shearing hazards between boom and chassis
The rear window is found near the telescopic boom.

- ATTENTION:

use CARE when opening and/or removing windows as they may chip or shatter, creating risk of injury to the operator in the cab and to those in the surrounding area. Take proper precautions and use accident prevention equipment (goggles, gloves, helmet, etc.).



(fig.6/C)

FRONT EMERGENCY EXIT

(fig.7/C pos."1")

The emergency exit is identified and marked on the front window.

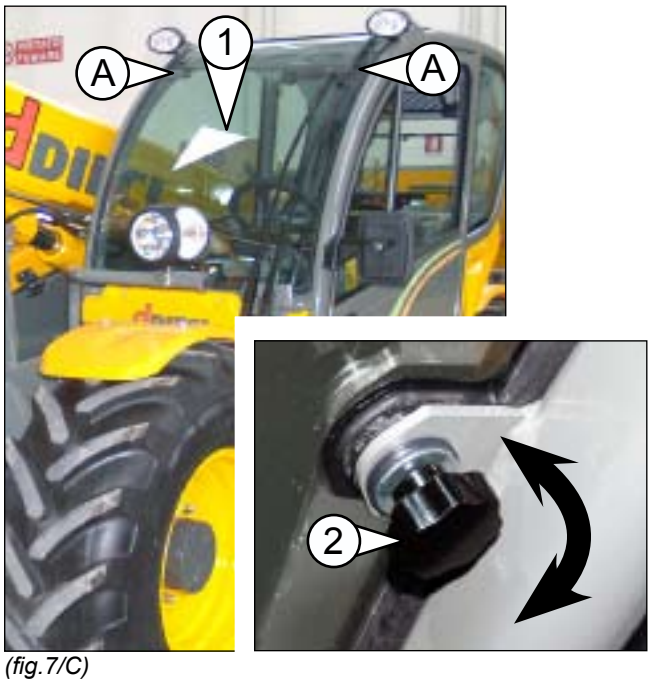
- In case the window must be opened completely, slide out the locking pin (fig.7/C Pos."2") ANTICLOCKWISE and push the window outward. The knobs are positioned inside the cab at the sides of the front window (fig.7/C Pos."A").
- Turn the knobs CLOCKWISE TO TIGHTEN THEM.

- ATTENTION:

During normal work operations, the window must always be completely fastened and resting on the cab. In these conditions, opening, even partial, is NOT allowed.
The front window is found near the telescopic boom.

- ATTENTION:

use CARE when opening and/or removing windows as they may chip or shatter, creating risk of injury to the operator in the cab and to those in the surrounding area. Take proper precautions and use accident prevention equipment (goggles, gloves, helmet, etc.).



(fig.7/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

ENGINE BONNET OPENING LEVER
(fig.8/C Pos.”1”)

To open the engine bonnet, pull the lever (fig.8/C Pos.”1”) towards the front of the vehicle, until it clicks.

To re-insert the block, just close the engine bonnet with slight pressure. Always check that it is closed correctly before starting to operate or before moving away from the vehicle.

***- PROHIBITION*:**

it is prohibited to operate with the engine bonnet open.

(fig.8/C)

MAX POWER 180W
(fig.9/C Pos.”1”)

- Power 12v 180w for direct current users (battery chargers, cell phones, etc.).

- ATTENTION:

Do not connect users with nominal voltage exceeding 12 volts and power consumption exceeding 180W. DANGER of damage to the electrical system.

(fig.9/C)

COURTESY COMPARTMENT
(fig.10/C Pos.”1”,”3”,”4”, fig.11/C Pos.”5”)

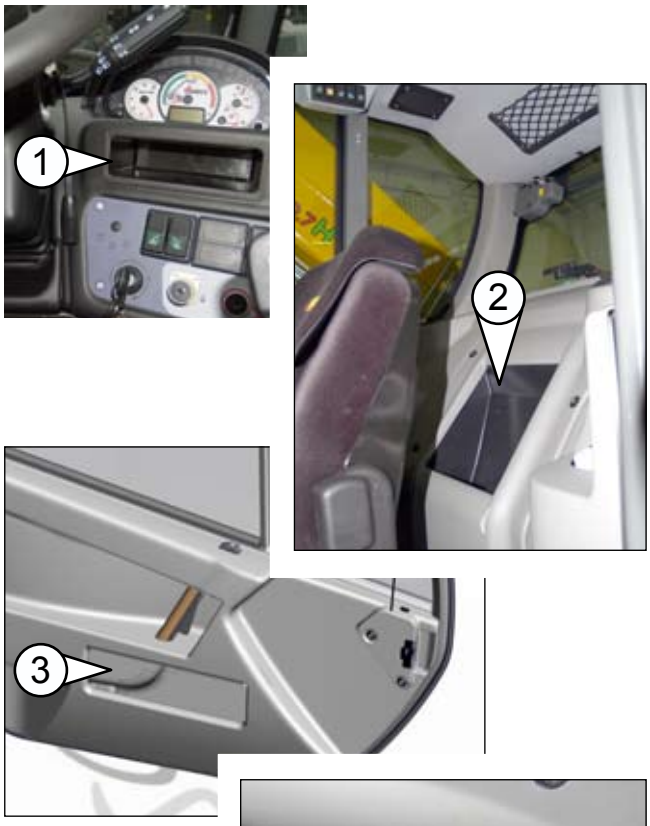
The courtesy compartment (fig.11/C Pos.”5”) is optional.

TECHNICAL DOCUMENTATION POCKET
(fig.10/C Pos.”2”)

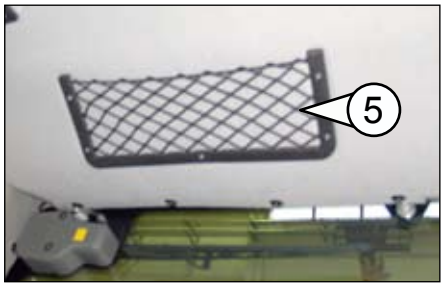
Technical documents must be kept in their pocket (fig.10/C Pos.”2”). The use and maintenance manual and the parts catalogue must always be available inside the vehicle for quick reference.

- ATTENTION:

The User’s Manual and the parts catalogue are an integral part of the vehicle and must remain with it even when it is sold to a new owner. The manual must be carefully kept aboard the vehicle for a quick reference and it must be written in the operator’s language. If the manual is creased, partially damaged or is not legible, replace it immediately. (fig.10/C)



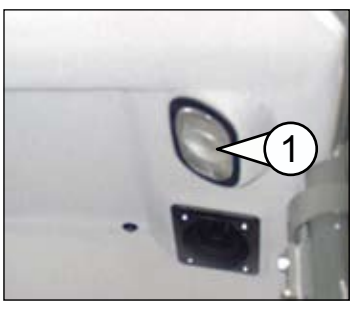
(fig.10/C)



(fig.11/C)

Interior cab lighting
(fig.12/C Pos.”1”)

To switch the light on inside the cab, act on the ceiling light, pressing one of the ends. In the central position (neutral) the lighting is off.



(fig.12/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

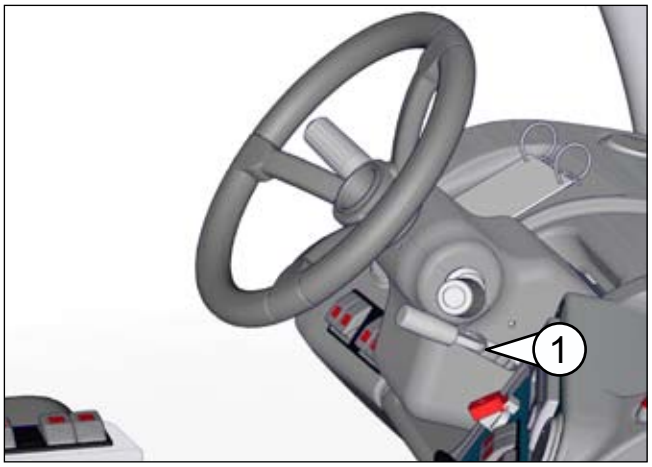
STEERING WHEEL (adjustment)
(Fig.15/C)

To adjust the steering wheel:

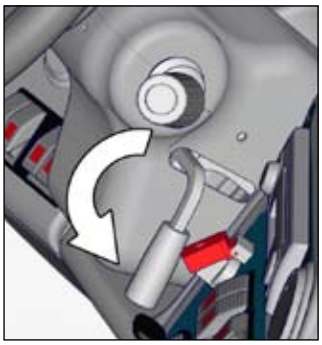
- Turn lever “1” (fig.15/C) downwards to release movements (fig.16/C).
- Push or pull the steering wheel to reach the desired position (fig.18/C).
- Push the steering wheel down or pull it up in order to reach the desired height (fig.19/C).
- Turn the handle (fig.17/C) up to block the steering wheel in its actual position. For correct Screw in with force.

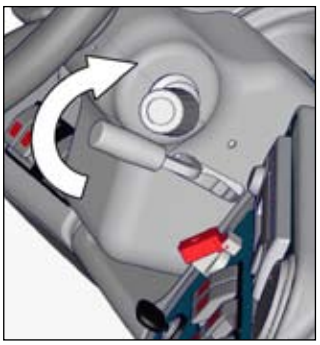
- ATTENTION:

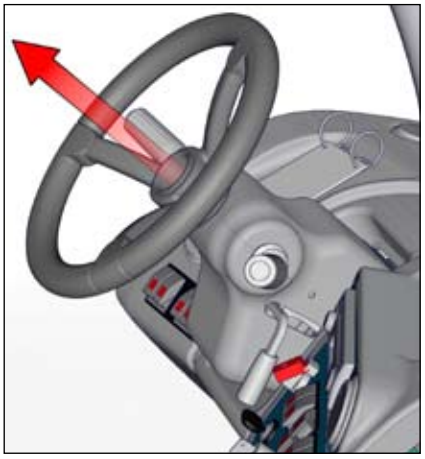
The steering wheel is correctly adjusted when the operator, with his/her back resting against the back of the seat, is able to take hold of the furthest part of the steering wheel with his/her elbows slightly bent.

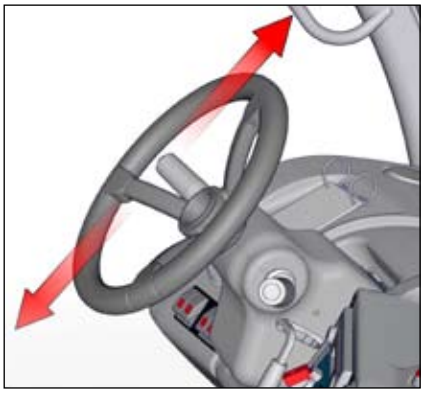


(fig.15/C)


(fig.16/C)


(fig.17/C)


(fig.18/C)


(fig.19/C)

SAFETY BELTS
(fig.20/C)

To fasten seat-belts:

1. Slide the tab (1) into the buckle (2) (tab.”A”).
2. Make sure it has been clicked in properly, then fit the belt around your body and adjust (tab.”B”).

- ATTENTION:

The belt is correctly adjusted when it fits tightly around the waist (Fig.21/C).

To unfasten the seat-belt: (”C”):

1. Press the red button (3) on the buckle (2).
2. Slide the tab out (1).

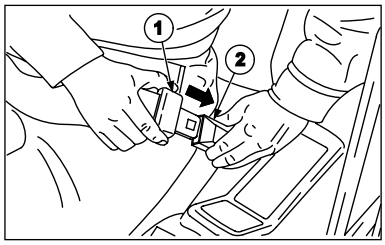
- ATTENTION:

Drive the vehicle only with the seat belt properly fastened and adjusted. Driving with the seat-belt unfastened, increases the risk of accidents.

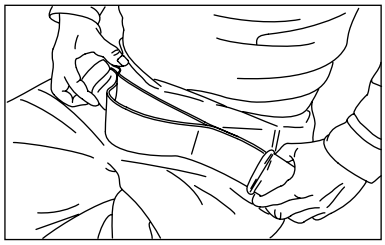
- ATTENTION:

Do not use damaged or warn seat belts.
Do not use seat belts installed on vehicles that have been involved in accidents. Worn, damaged or weak the seat belts may break or give in during a collision, causing serious injury to the operator.

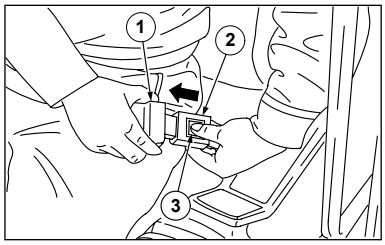
“A”



“B”



“C”



(fig.20/C)

(fig.21/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

SEAT
(fig.22/C)

DIECI supplies different seat models depending on client requirements. The vehicle is equipped with a safety system called “man in” which uses an electrical micro switch in the driver’s seat. This micro switch is located inside the seat cushion (fig.22/C Pos.”A”).

The engine can only be started if the operator is properly seated in the driver’s seat and the forward/reverse lever is in the neutral “N” position.

(fig.22/C)

Seat adjustment
(fig.23/C)

The seat can be adjusted to different positions:

A - Lock/unlock springing (horizontal/vertical) (fig.23/C).

B - Adjustment of pneumatic springs (optional) (fig.23/C).

C - Manual spring adjustment (optional) (fig.23/C).

D - Longitudinal seat positioning (fig.24/C).

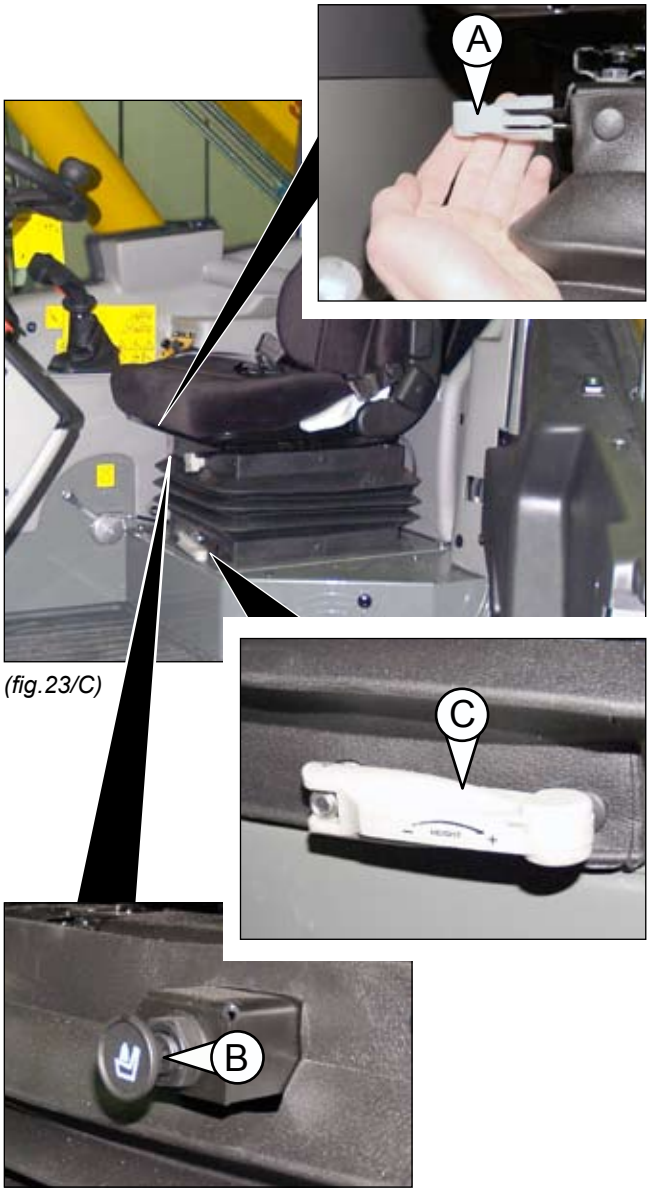
E - Adjustment of backrest inclination (fig.24/C).

- To unlock springs (horizontal/vertical) bring lever “A” (fig.23/C) toward the front of the vehicle. Bring lever “A” (fig.23/C) toward the rear of the vehicle to lock springs.

- To adjust the pneumatic spring rate, pull pin “B” (fig. 23/C) to let out pressure and soften suspension.
  Push pin ”B” (fig.23/C) to increase pressure and harden suspension.

- Manual adjustment of the spring rate is obtained by rotating lever “C” (fig. 23/C) toward the symbol “+” printed on it to harden suspension.
  Turn lever ”C” (fig.23/C) toward the symbol “-” printed on it to soften suspension.

- For longitudinal seat adjustment, move lever “D” (fig.24/C) toward the left side of the vehicle by sliding along the runners.
  Release the lever when the desired position has been reached. Move slightly in order to make sure that the locking pin is positioned correctly in its housing.

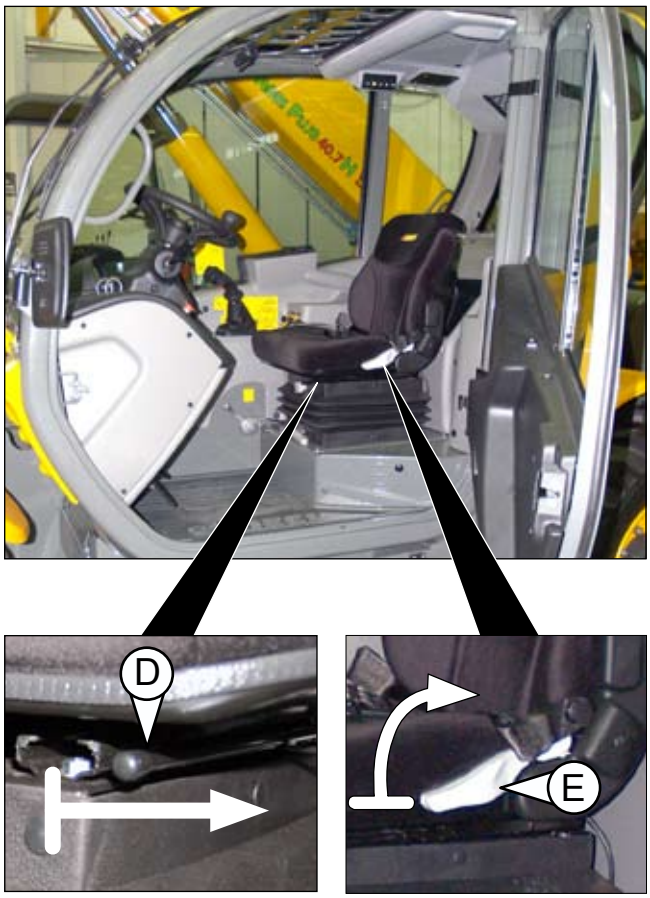


(fig.23/C)

- To adjust backrest inclination, move lever “E” (fig.24/C) and push back on the backrest. The backrest will automatically adapt to the Operator’s body.

- ATTENTION:

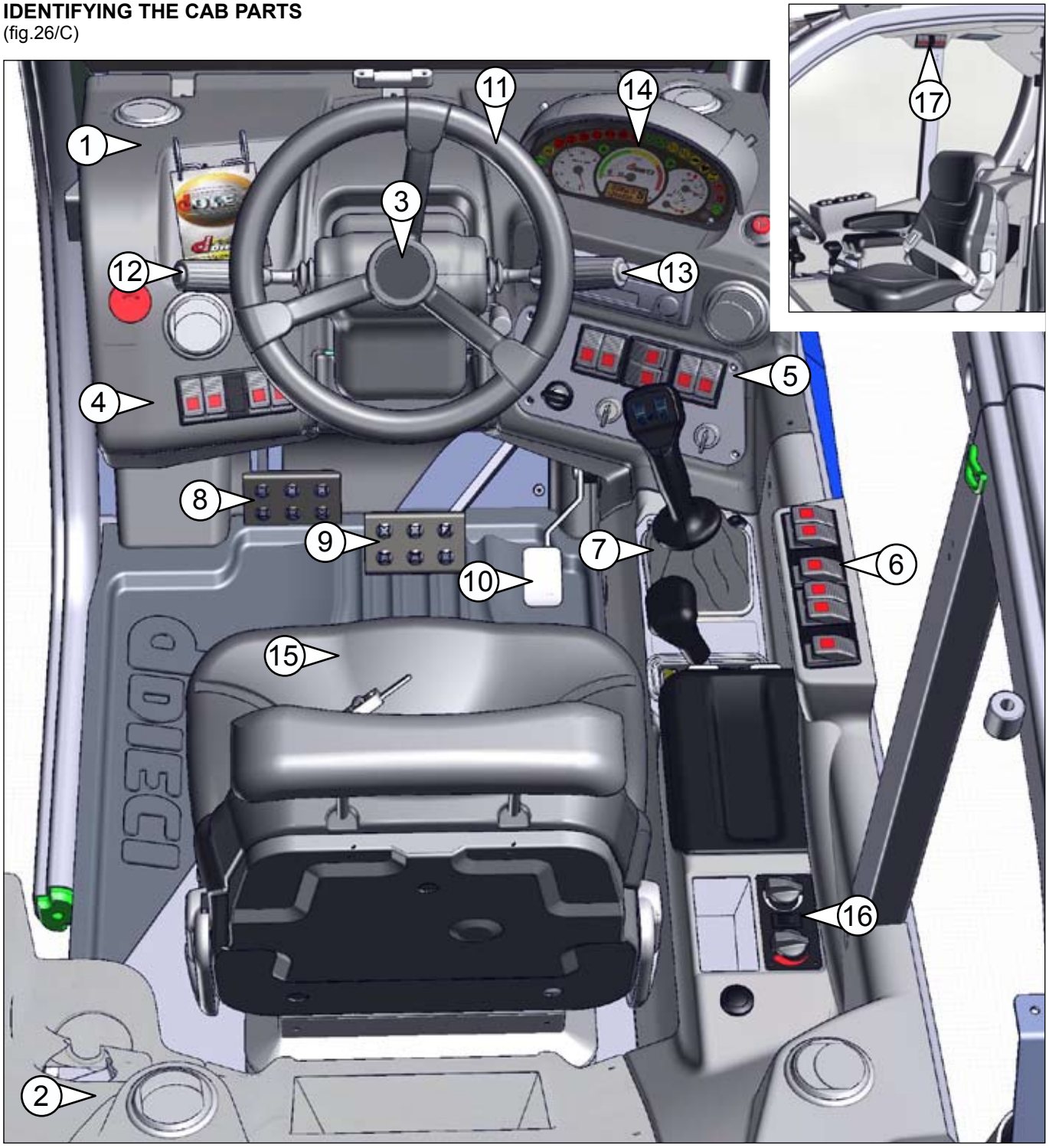
The seat has been correctly positioned when the operator is able to push the brake pedal completely down with his/her back firmly against the backrest.



(fig.24/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

IDENTIFYING THE CAB PARTS
(fig.26/C)



(fig.26/C)

1. Dashboard with front air-vents
2. Dashboard with rear air-vents
3. Adjustable steering shaft
4. Left dashboard
5. Right dashboard
6. Upper dashboard
7. Lever dashboard/Joysticks
8. “INCHING” pedal
9. Brake pedal
10. Accelerator pedal
11. Steering wheel
12. Gear lever
13. Multi-function lever
14. central dashboard
15. Seat
16. Right rear dashboard
17. Upper ashboard

CENTRAL DASHBOARDINDICATOR LIGHTS
(fig.27/C)

(fig.27/C)

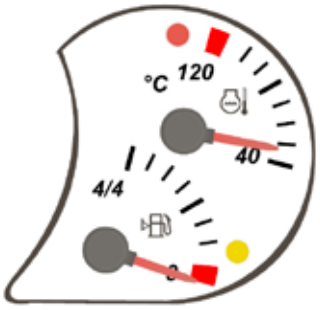
- Full beam headlights indicator light (Blue)
- Direction indicator lights (Green)
- Spark plug pre-heating indicator light (Yellow)
- Air filter obstructed light (Red)
- Hydrostatic oil filter indicator light (Red)
- Engine oil pressure indicator light (Red)
- Generator indicator light (Red)
- Insufficient pressure in the brake accumulator indicator light (Red)
- Parking brake light - Parking brake (Red)
- General alarm indicator (Red)
- Mechanical gear engaged indicator light (Green)
- Fast speed engaged light (Green)
- Wheels alignment indicator consent (Yellow)
- Rear axle alignment indicator consent (Yellow)
- Slow gear (Yellow)
- Fast gear (Yellow)
- Rear axle block engagement light (Yellow)
- Parking brake and low brake fluid level indicator light (Red)
- Drive oil temperature light. (Red)
- Outriggers lowered correctly light (Green)
- Fuel level indicator instrument
- Water temperature indicator
- Forward gear indicator light (Green)
- Reverse gear indicator light (Green)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

CENTRAL DASHBOARD - INSTRUMENT USE
(fig.28/C)

(fig.28/C)

Engine rev counter



Engine water temperature instrument

Fuel level indicator instrument

Engine rev counter
This instrument indicates the number of RPMs the engine is carrying out in that moment.

Instrument for load monitoring

LCD

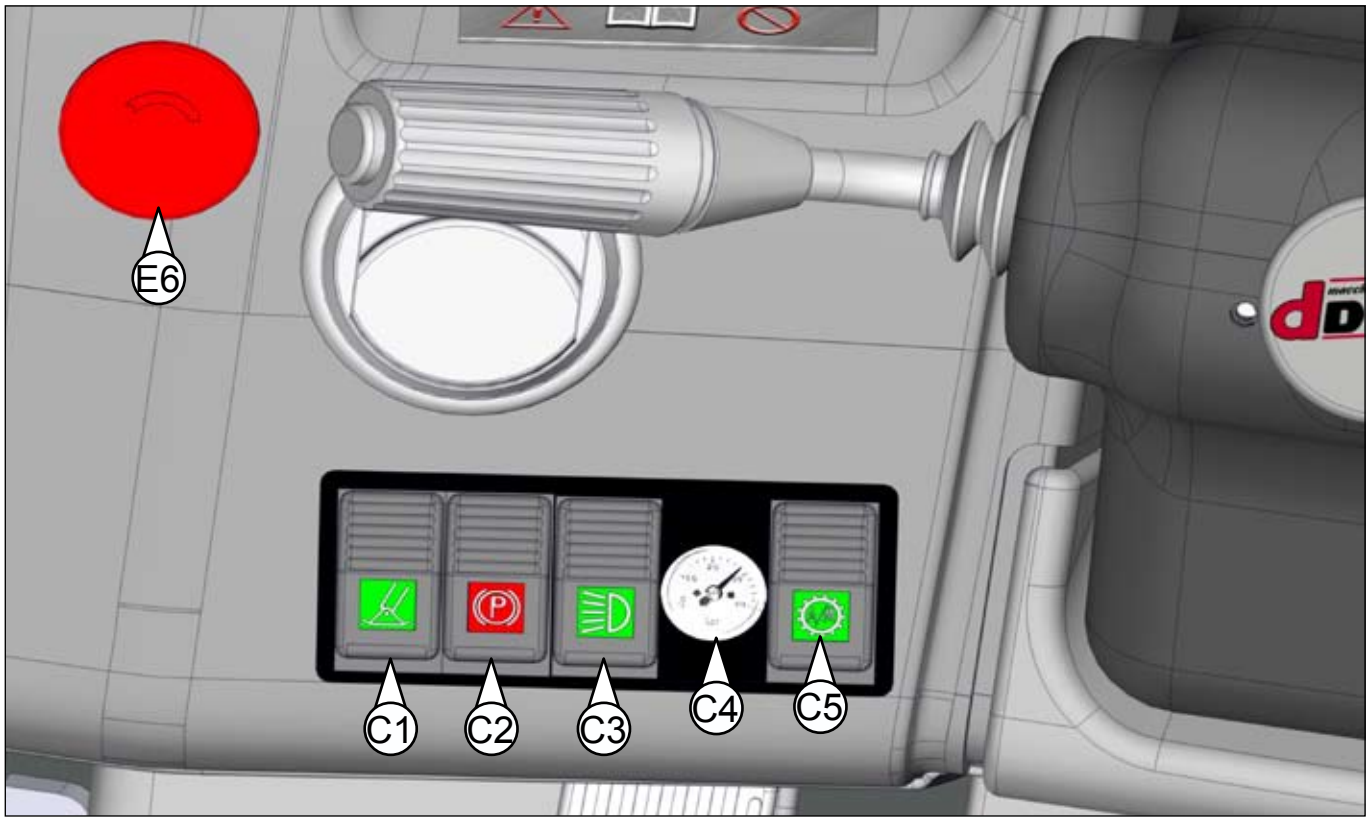
Load monitoring instrument
The device detects the stability of the vehicle.

LCD
The LCD contains the clock, the hour meter displaying hours of use of the vehicle, the vehicle toeing state “N” (neutral),1st, 2nd, 3rd, 4th gear engaged.

Engine water temperature instrument
During normal use, the temperature hand moves from the lower part of the instrument (right red mark), stopping when having reached the first fourth of the scale. This is the optimal condition for engine operation. If the temperature should rise excessively, almost reaching the maximum level (upper red mark), stop the engine and verify the cause. When the red indicator light switches on, the maximum temperature alarm is signalled. Operate at low RPMs (max 1500) in order to avoid damaging the cool engine. Avoid abrupt manoeuvres and acceleration until the right red mark has been passed.

Fuel level indicator instrument
The instrument hand indicates the quantity of diesel present in the tank at any given moment. The maximum quantity is marked by the position of the hand on the left side. The hand will move down progressively, passing over a red mark which indicates minimum level (reserve), indicated by the same yellow light. When the hand completely stops (right side limit switch), the fuel tank is empty. To avoid damaging the engine, always keep the pointer above the minimum level.

left front dashboard (standard and optional electrical switches, indicator lights and control levers)
(fig.29/C)



(fig.29/C)

C1 Outriggers up/down switch
(Green) **(NOT AVAILABLE)**

C2 Parking brakes switch
(Red)

C3 Light on switch
(Green)

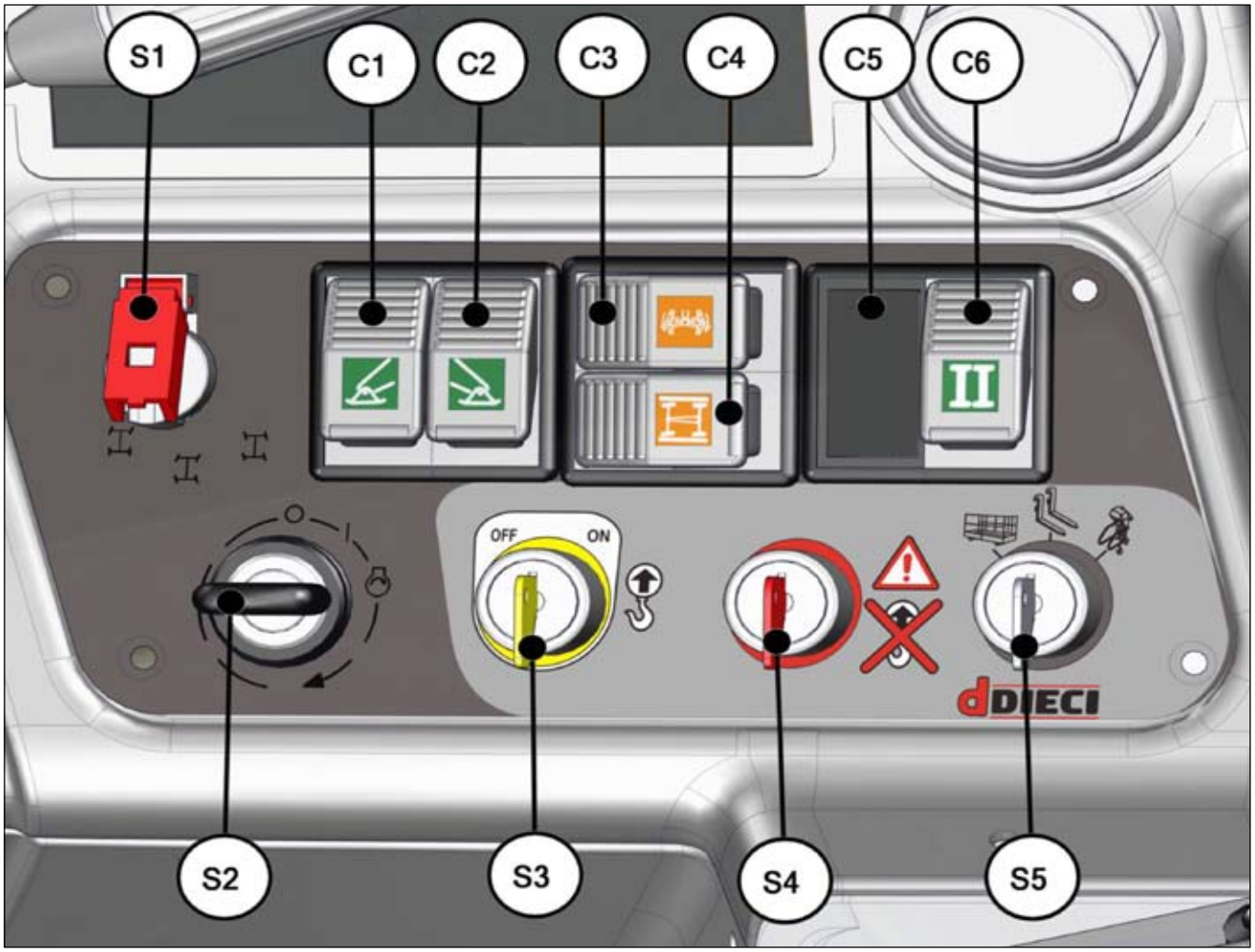
C4 Servo brake accumulator manometer.
(Present on Agri Max 70.10)

C5 Gear change switch
(green)

E6 EMERGENCY BUTTON
(hydraulic plant and thermal motor switch off)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

right dashboard (standard and optional electrical switches, indicator lights and control levers)
(fig.30/C)



(fig.30/C)

C1 Left outrigger foot up/down switch (Green) **(NOT AVAILABLE)**

C2 Right outrigger feet up/down switch (Green) **(NOT AVAILABLE)**

C3 Front axle levelling switch (optional) (Yellow)

C4 Wheels alignment indicator consent (optional) (Yellow)

C5 Optional (Available)

C6 Additional pump switch (telehandler double speed) (optional) (Green)

S1 Steering selector (Optional)

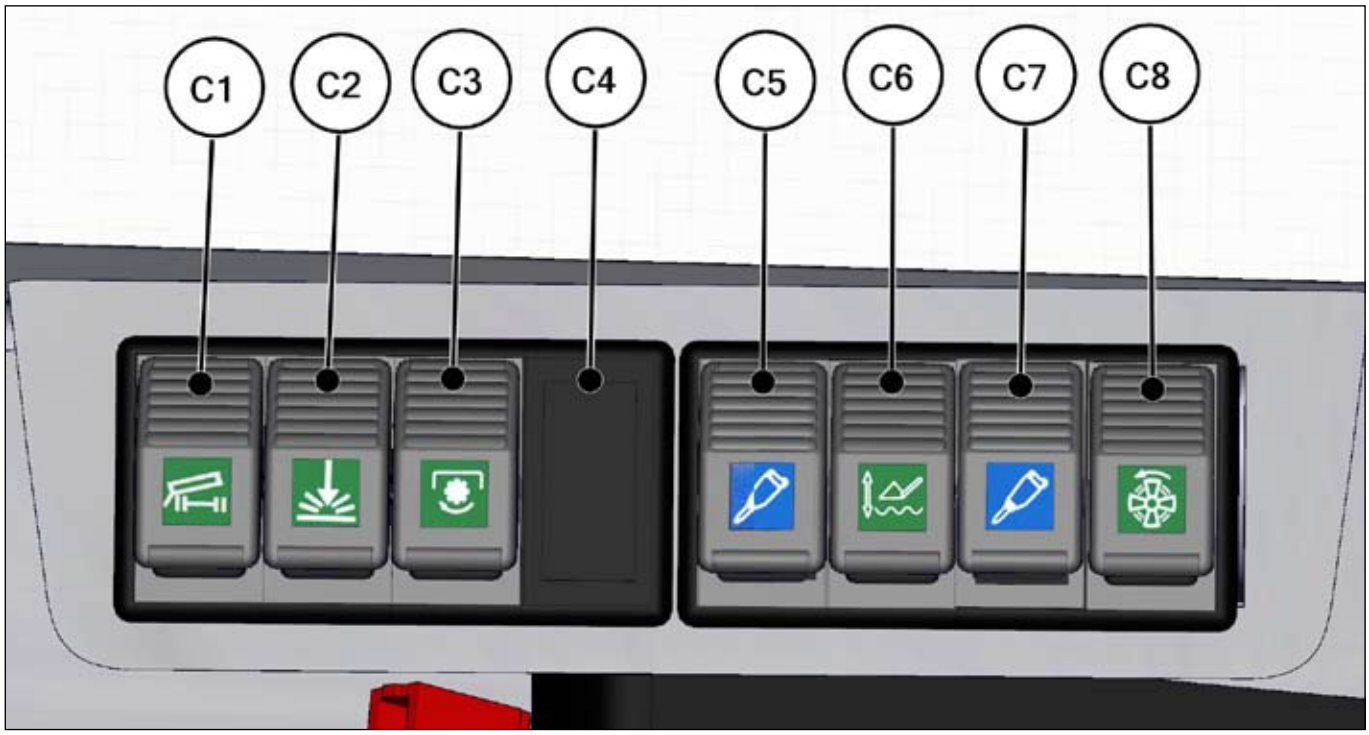
S2 Thermal motor starter key/selector

S3 Anti-tipping device key/selector (Yellow Key)

S4 Alarm return key/selector (Red Key)

S5 Vehicle functions selector/key (optional) (Grey Key)

upper dashboard (standard and optional electrical switches, indicator lights and control levers)
(fig.31/C)



(fig.31/C)

C1 Trailer Switch (optional)
(Green)

C2 Rear solenoid valve switch (optional)
(Green)

C3 PTO “Power take-off” switch (optional)
(Green)

C4 Optional
(Available)

C5 Boom head solenoid valve switch (optional)
(Blue)

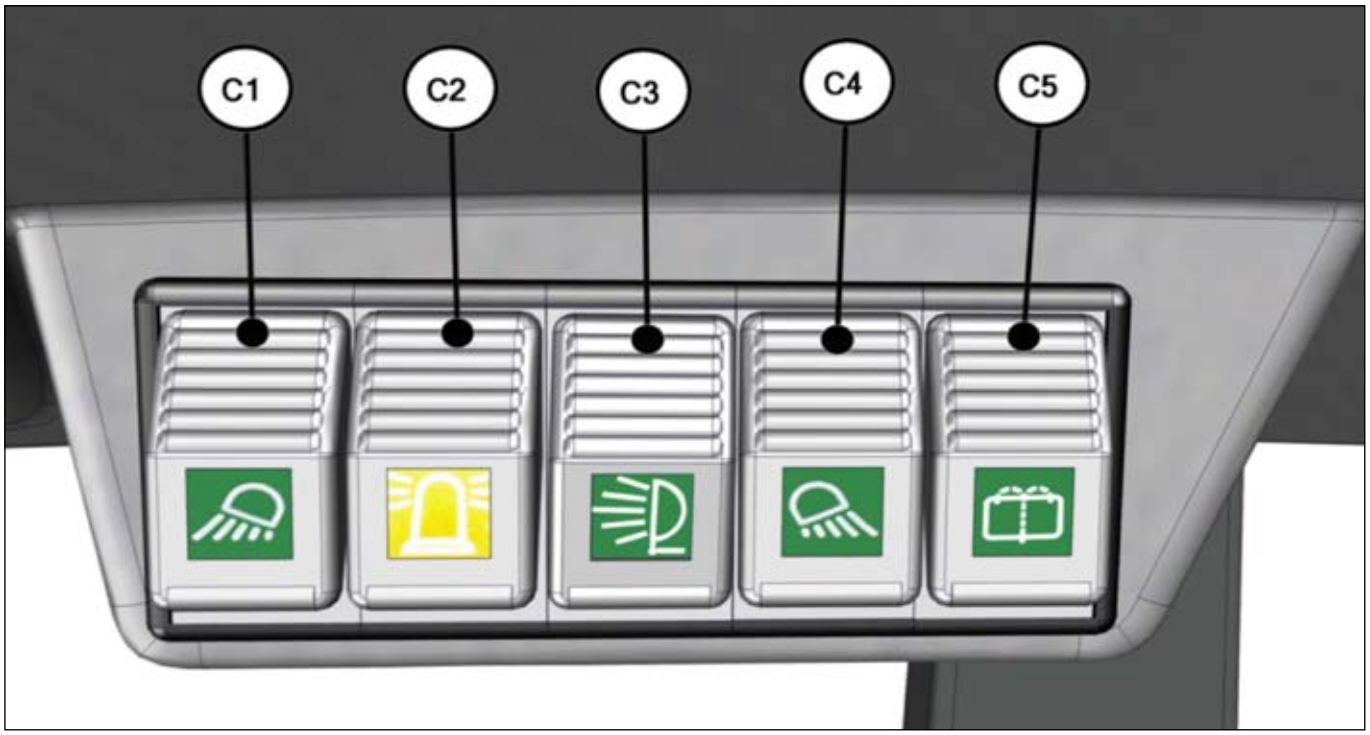
C6 Boom suspension consent (optional)
(Green)

C7 Boom head 12v electric socket switch (optional)
(Blue)

C8 Fan inversion switch (optional)
(Green)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

roof dashboard (standard and optional electrical switches, indicator lights and control levers)
(fig.32/C)



(fig.32/C)

C1 Front work lights switch (optional)
(Green)

C2 Revolving light switch
(Yellow)

C3 Boom head work lights switch (optional)
(Green)

C4 Rear work lights switch (optional)
(Green)

C5 Rear window windscreen wiper/washer
(Green)

emergency button
(fig.33/C Pos.”1”)

The vehicle is equipped with an emergency stop device that allows to avoid situations of imminent danger or danger in progress. By pressing the emergency button (fig.33/C Pos.”1”) the thermal motor switches off and the vehicle stops.
The emergency stop device is released by turning the “mushroom-head” clockwise. Turning the button authorises vehicle re-start.

- ATTENTION -

The button must be used in the case of:

- **Emergency**, to switch the thermal motor off and the vehicle in situations of imminent danger or danger in progress.

- **Maintenance**, for safety to prevent accidental ignition of the vehicle during routine or extraordinary maintenance interventions.

- ATTENTION -

If the engine cannot be started, check that an emergency button has not been pressed (fig.33/C Pos.”1”). If pressed, contact the Safety Manager to make sure there is no maintenance in progress, malfunctioning of the vehicle or dangerous situations.

(fig.33/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

IGNITION SWITCH
(fig.34/C)

The ignition switch, with the key, allows you to:
- Switch on the instruments.
- Switch on the diesel engine.
- Disengagement of the parking brake in automatic, with diesel engine running (fig.34/C Pos.”1”).
- Automatic engagement of the parking brake, with diesel engine off (fig.34/C Pos.”0”).

Conditions for start-up

Start-up can only occur if:
- The operator is correctly seated in the driver’s seat.
- The gear selector is in the “N”, or neutral, position.

Switching on instruments

Turn the key to position “1” (fig.34/C) to power the electrical/ electronic instruments.
When the dashboard is switched on, a check will be carried out on the instruments with all the indicator lights switched on and emission of an acoustic signal.
These will remain on until the engine is switched on:
- Battery indicator light
- Engine oil pressure indicator light

Other indicator lights may remain lit depending on the functions activated.

When the engine is running, the indicator lights signalling faults/malfunctions should go off and only those referring to active functions should remain switched on. If this is not the case, consult the “maintenance” chapter of this manual and contact a dieci service centre.

Start-up

- Turn the key to position “1” (fig.34/C) to power the instruments.
- Turn the key to position “2” (fig.34/C) and keep it there for a few seconds in order to start-up.
- Once the engine has been started, release the key.

In the engine does not start within 5 seconds, try again at regular 15 second intervals to avoid overloading the starter.

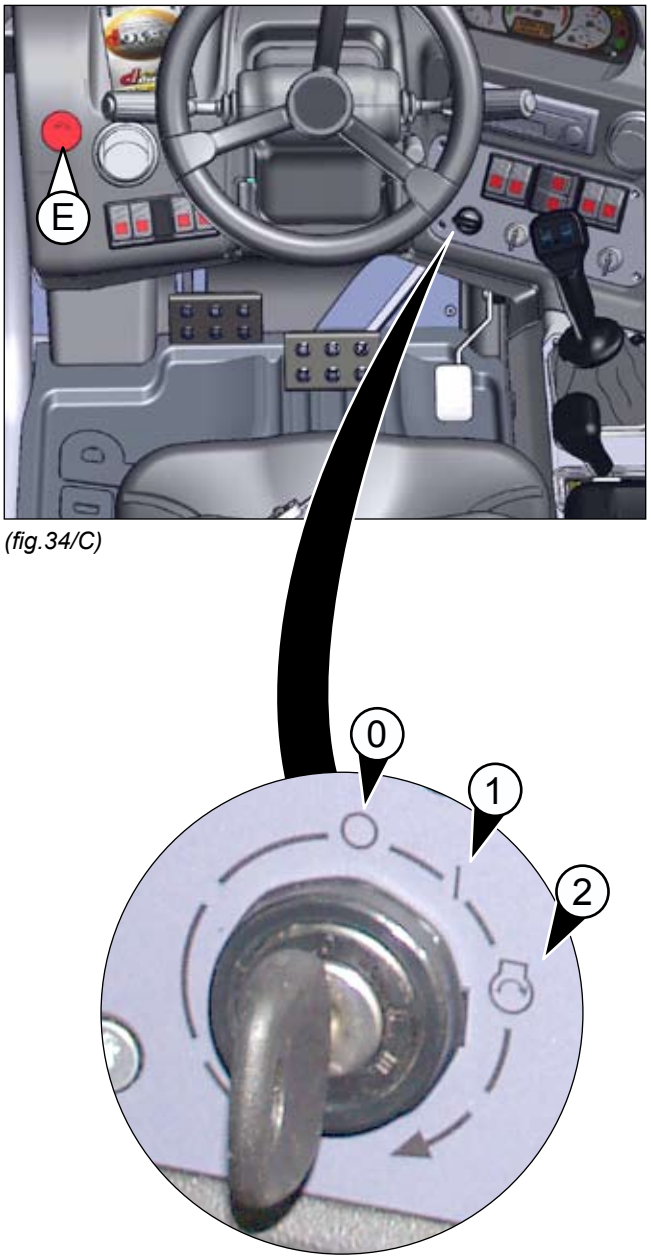
During the first few minutes of use, keep transfer and load lifting speed low in order to heat up the engine and hydraulic oil. Operate at low RPMs (max 1500), avoiding sharp manoeuvres and accelerations until the temperature has risen.

- ATTENTION:

Bring the engine to a high number of RPMs before high temperature and pressure can cause any serious damage to the engine or the hydraulic system.

- ATTENTION:

With the motor started, the automatic parking brake disengages. Before starting up the vehicle, always verify that the parking brake has been manually engaged using its switch. To release the parking brake when the engine is stopped, refer to the paragraph, “towing the vehicle”.



(fig.34/C)

ATTENTION

If the engine cannot be started, check that an emergency button has not been pressed (fig.34/C Pos.”E”). If pressed, contact the Safety Manager to make sure there is no maintenance in progress, malfunctioning of the vehicle or dangerous situations.

If the engine does not start, consult the “maintenance” chapter of this manual and contact a ***dieci*** service centre.

PEDALS

accelerator pedal
(fig.36/C Pos.”1”)

Press down the accelerator pedal to increase engine RPMs and release it to decrease RPMs. The pedal operates directly on the engine injection pump.
The maximum speed of the vehicle changes of variation of the inflation pressure variation, the measurement and wear of the tyres.

service brake pedal
(fig.36/C Pos.”2”)
Press the service pedal to slow down or stop the vehicle. The pedal acts directly on the service brakes inside the differential axles. When the brake pedal is pushed, the rear stop lights switch on. The lights remain switched on until the pedal is released.

Periodically check that both lights are working.

⚠ - ATTENTION:

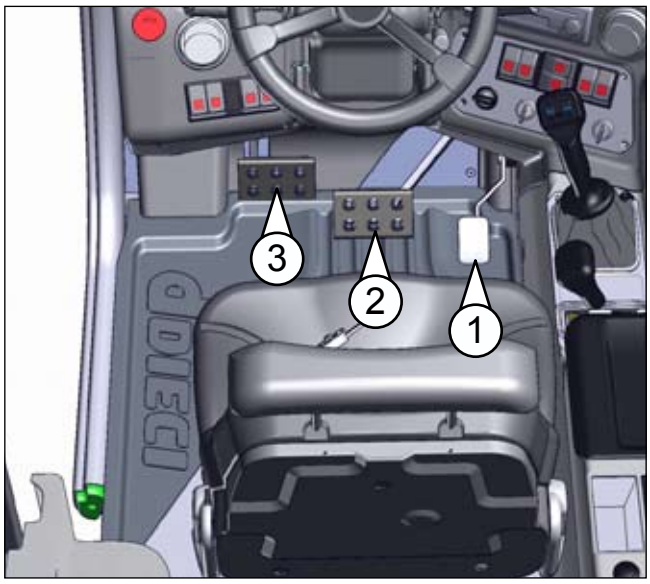
In the event of limited use of the pedal, periodically check that it is working properly. Contact a dieci service centre in the event of a problem.

“INCHING” pedal
(fig.36/C Pos.”3”)

The pedal allows for slow, precise movements forward even when the engine is running at a high RPM. It acts directly on the hydrostatic transmission.
The vehicle stops, remaining partially braked, when the pedal is fully pressed down.

⚠ - ATTENTION:

Do not press the “inching” pedal at high speeds, the vehicle will brake sharply and the diesel engine could go into overrevving.



(fig.36/C)

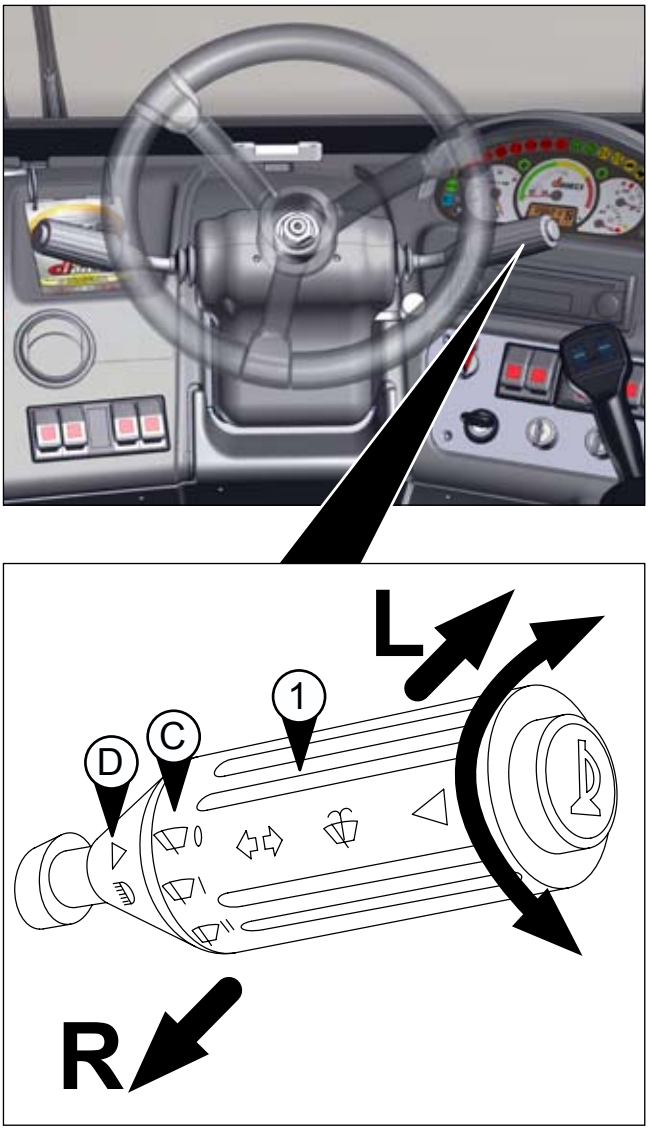
⚠ - CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

MULTIFUNCTION LEVER

Direction indicators

- Pull the lever towards the rear of the vehicle to signal a curve to the right (fig.38/C Pos.”R”).
- Push the lever towards the front of the vehicle to signal a curve to the left (fig.38/C Pos.”L”).

The indicators only function when the instruments are powered. An indicator light on the central dashboard signals the activation of the direction indicators.



(fig.38/C)

function buttons

- The middle button on the handle activates the front windscreen wipers (fig.39/C Pos.”2”).
- The button located at the far end of the handle activates the horn (fig.39/C Pos.”3”).

Front windscreen wiper switch-on

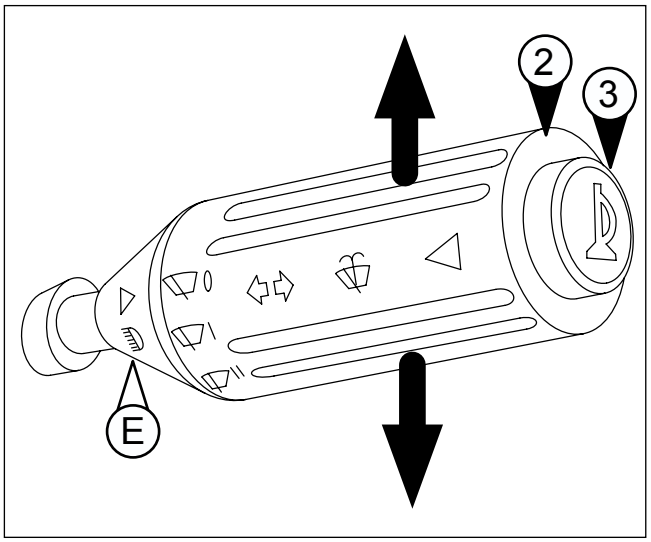
Turning the knob “1” (fig. 38/C) the front windscreen wiper.

The symbols on the knob (fig.38/C Pos.”C”) indicate, with an arrow, (fig.38/C Pos.”D”) that the windscreen wiper is:

0 Off

I - Slow

II - Fast



(fig.39/C)

Full beam headlights on

Full beam headlight (fig.39/C Pos.”C”) is activated.

- Pull lever up for individual flashes.
- Pull the lever down for continuous use.

FORWARD/REVERSE GEAR SELECTION LEVER

This lever (fig.41/C) allows to change direction. On the dashboard, the indicator lights that indicate the direction in which the vehicle is travelling light up (fig. 42/C pos. “F-R”). If the indicator lights are switched off, the vehicle is in neutral. If the lever is kept in the intermediate position, the gear is in neutral.

- ATTENTION:

To engage the FORWARD/ REVERSE gear, move the lever upwards. This movement protects the lever from accidental manoeuvres.

- Moving the lever towards the front of the vehicle (fig.41/C) the FORWARD gear is engaged and the indicator light “F” (fig.42/ C) lights up.
- Moving the lever towards the rear of the vehicle (fig.41/C) , the reverse gear is engaged and indicator light “R” (fig.42/ C) lights up. When the reverse gear is engaged, an acoustic alarm is triggered.

- ATTENTION -

Lever movements are not active when:

- The parking brake is engaged.
- The operator is not seated correctly in the driver’s seat.

- ATTENTION -

Load handling
can be carried out only in “low” gear.

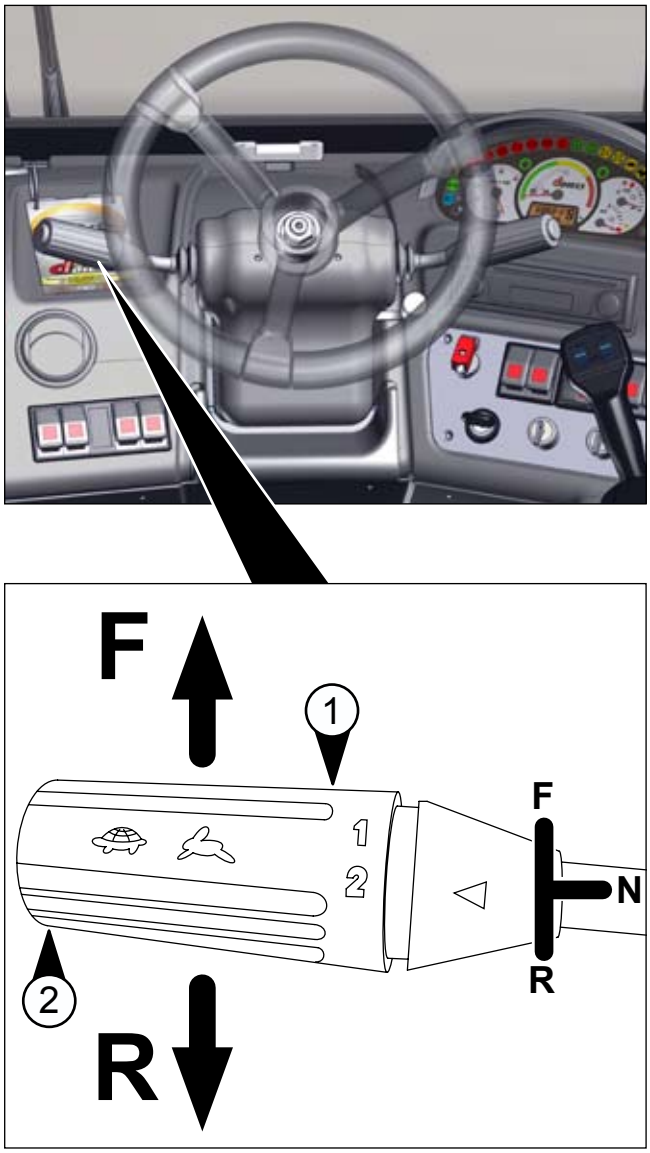
procedure for changing direction

- Reduce engine speed to a minimum and bring the vehicle to a halt.
- Select the new direction.

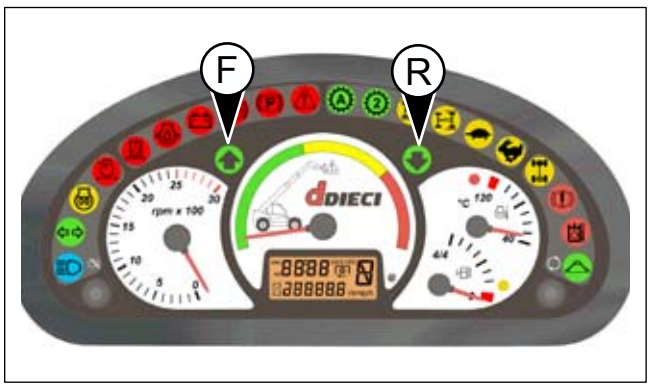
- ATTENTION:

Direction reversal is not permitted at speeds exceeding 2 km/h.

If the forward/reverse gear selector is moved to a position other than neutral when the parking brake is engaged, the transmission will not work.



(fig.41/C)



(fig.42/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

FAST/SLOW GEAR SWITCH
(fig.44/C Pos.”A-B”)

The two-speed mechanical selector is operated (fig.44/C Pos.”1”) using the selector.

To change gears:

- **bring the vehicle to a complete stop,**
- Press and hold down the “inching” pedal,
- Hold the switch downward (fig.44/C Pos.”B”) for a few seconds to engage the FAST gear. The indicator light (fig. 45/C Pos. “2”) signals engagement.
- Hold the switch upward (fig.44/C Pos.”A”) for a few seconds to engage the SLOW gear. The indicator light (fig. 45/C Pos. “1”) signals engagement.

- ATTENTION:

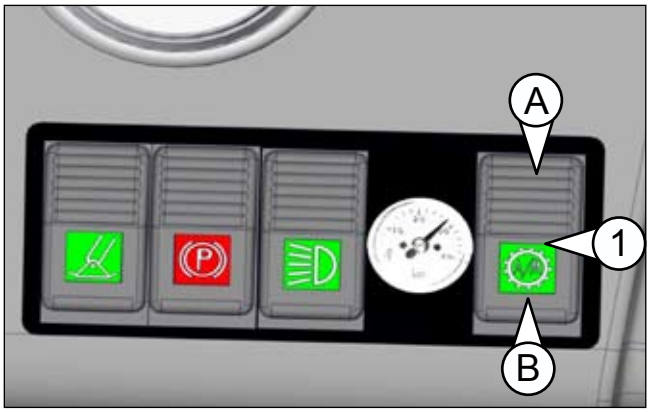
Insert SLOW gear to operate in the construction yard.
Insert the FAST gear for long transfers without a load, in unobstructed places, with good visibility with flat land without danger of pedestrian crossings.

- ATTENTION:

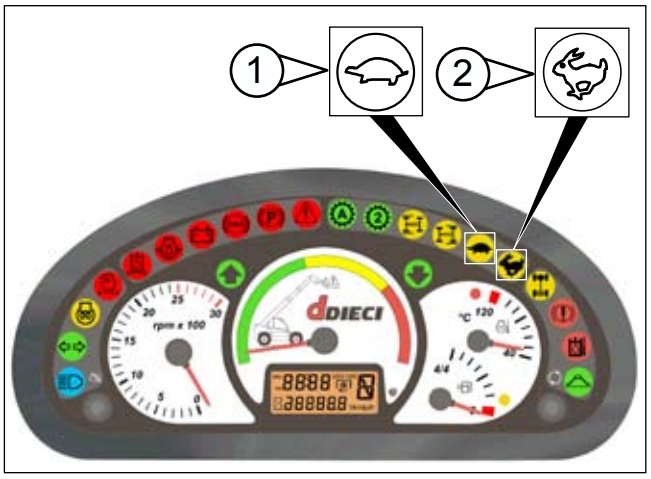
Do not change gears when the vehicle is in motion.

- ATTENTION:

Hold down the “inching” pedal until the selected gear’s corresponding indicator light switches on.



(fig.44/C)



(fig.45/C)

HYDRAULIC GEAR SWITCH (OPTIONAL)

(fig.46/C Pos.”1”)

The rotary function of the “forward/reverse” lever allows the hydraulic gear change.

To change gears:

- **bring the vehicle to a complete stop,**
- Press and hold down the “inching” pedal,
- Turn the lever “1”(fig.46/C) taking symbol “2” to the arrow (fig.46/C Pos.”2”) to engage the FAST gear. The indicator light (fig. 47/C Pos. “2”) signals engagement.
- Turn the lever “1”(fig.46/C) taking symbol “1” to the arrow (fig.46/C Pos.”2”) to engage the SLOW gear. The indicator light (fig. 47/C Pos. “2”) SWITCH-OFF signals engagement.

- ATTENTION:

The indicator light “1” (fig.47/C) signals that the mechanical gear is engaged.

- ATTENTION:

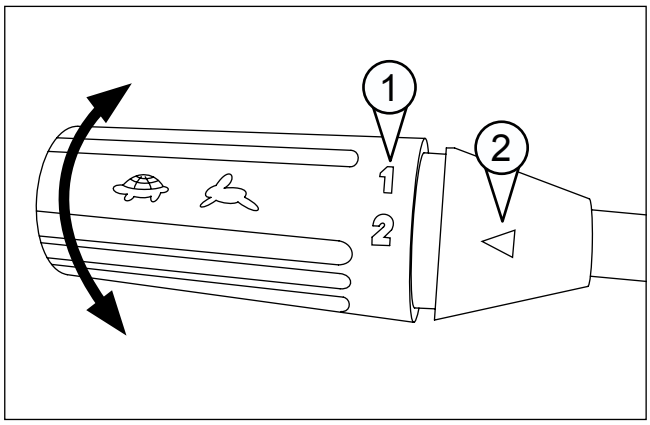
Insert SLOW gear to operate in the construction yard.
Insert the FAST gear for long transfers without a load, in unobstructed places, with good visibility with flat land without danger of pedestrian crossings.

- ATTENTION:

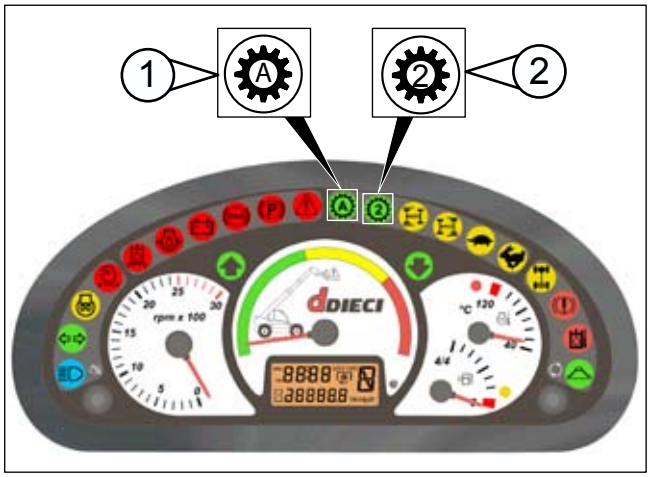
Do not change gears when the vehicle is in motion.

- ATTENTION:

Hold down the “inching” pedal until the selected gear’s corresponding indicator light switches on.



(fig.46/C)



(fig.47/C)

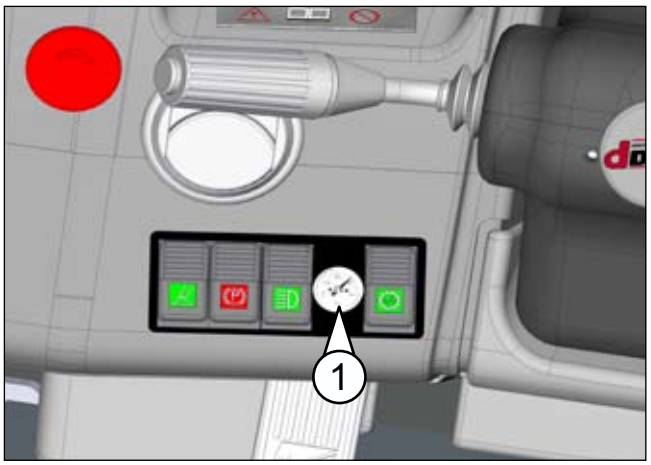
- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

Servo brake accumulator manometer
(Present on Agri Max 70.10)
(fig.48/C Pos.”1”)

The manometer (fig.48/C Pos.”1”) allows to keep servo brake pressure monitored. In the event of anomalies and malfunctioning, the pressure could drop. The pressure must never drop below 18 bar. In the event of low pressure (below 18 bar) stop the vehicle and contact the ***DIECI*** authorised workshop to eliminate the defect.

PROHIBITION

IT IS PROHIBITED to operate with servo brake accumulator pressure below 18 bar.



(fig.48/C)

PARKING BRAKE

The parking brake must be engaged whenever the operator leaves the vehicle, whether the engine be switched off or on, and even in the event of only momentary stops or any time the vehicle is working at a halt with the outriggers lowered (if present). The brake is automatically engaged when the engine is switched off.

When switch “A” (fig.49/C) is pressed, the parking brake is engaged. The indicator warning light on the push button and the central dashboard (fig.50/C Pos.”1”) indicate proper engagement of the parking brake. When the parking brake is engaged, the vehicle cannot move and the hydrostatic transmission is disengaged.

To ensure the parking brake is working properly, contact an authorised dieci workshop.

- ATTENTION -

Id indicator light “2” should switch on (fig.50/C) the parking brake is blocked.

Do not advance with the vehicle.

Consult the “D Maintenance” chapter in this manual.

If the indicator light should remain on, contact a dieci after-sales centre.

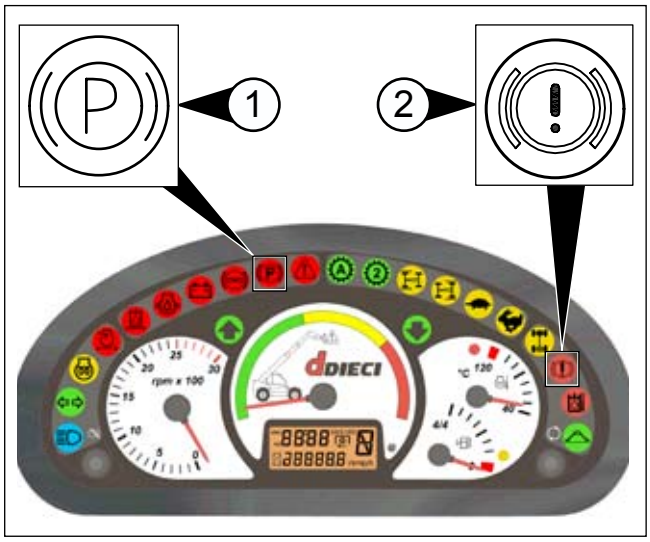
- ATTENTION:

In the event the parking brake fails do not use the vehicle.

- ATTENTION:

Unauthorised modifications of the rear axle ratio, the vehicle weight, or wheel and tyre dimensions may compromise proper functioning of the parking brake.

(fig.49/C)



(fig.50/C)

SPIRIT LEVEL AND INCLINOMETER
(Fig.51/C)

The spirit level (fig.51/C Pos.”1”) is situated in the centre of the dashboard. Used to check the correct transversal levelling of the vehicle.

For safe operation, the air bubble must be in the centre; with maximum approximation margin of 2° to the right or left. The inclination exceeds 2° when the air bubble is completely outside of the two margins “A” and “B” (fig.52/C).

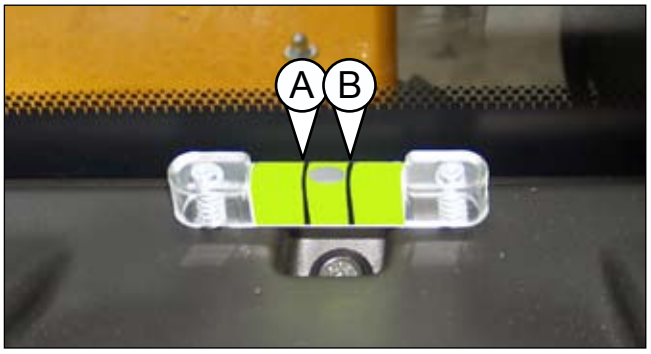
The vehicle can mount two types of spirit level, standard (fig.52/C) or optionals (fig.53/C).

Reference grading is present in the optional level. The inclination exceeds 2° when the air bubble is completely outside of the two degrees (fig.53/C pos.”A”).

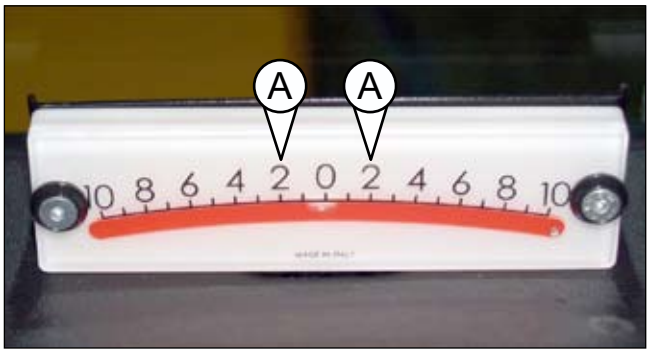
PROHIBITION

<u>IT IS PROHIBITED</u> to operate with inclination transversal exceeding 2°.

(fig.51/C)



(fig.52/C)



(fig.53/C)

BOOM CONTROL LEVER
(fig.54/C Pos.”1”)

This lever is found to the right of the operator (fig.54/C Pos.”1”). It is used to manoeuvre the boom and its extremities.

- ATTENTION:

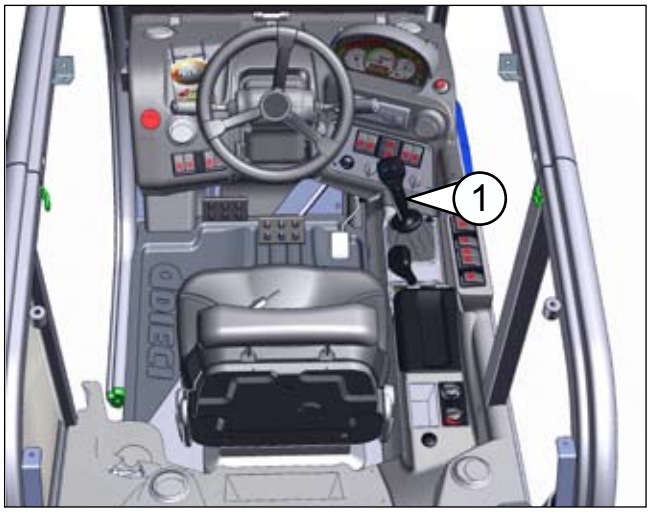
Before using the boom make sure that the surrounding area is free. Make sure that the loads to be raised correspond with the capacity diagrams of the vehicle.

- ATTENTION:

The instructions refer to the standard version at the time of printing. In there are special options or following technical updates, lever movements may correspond to different controls. For this reason, always refer to instructions present inside the driver’s cab.

- ATTENTION:

The Manufacturer offers a range of levers (Joysticks) for boom movement with different technical specifications and those different than the standard version (see following pages).



(fig.54/C)

Joystick 3 in 1 extension ON/OFF (standard version)
(fig.55/C)

Before each manoeuvre, press and hold down the "man in" control lever ""**A**" (fig.55/C).

Boom manoeuvre:

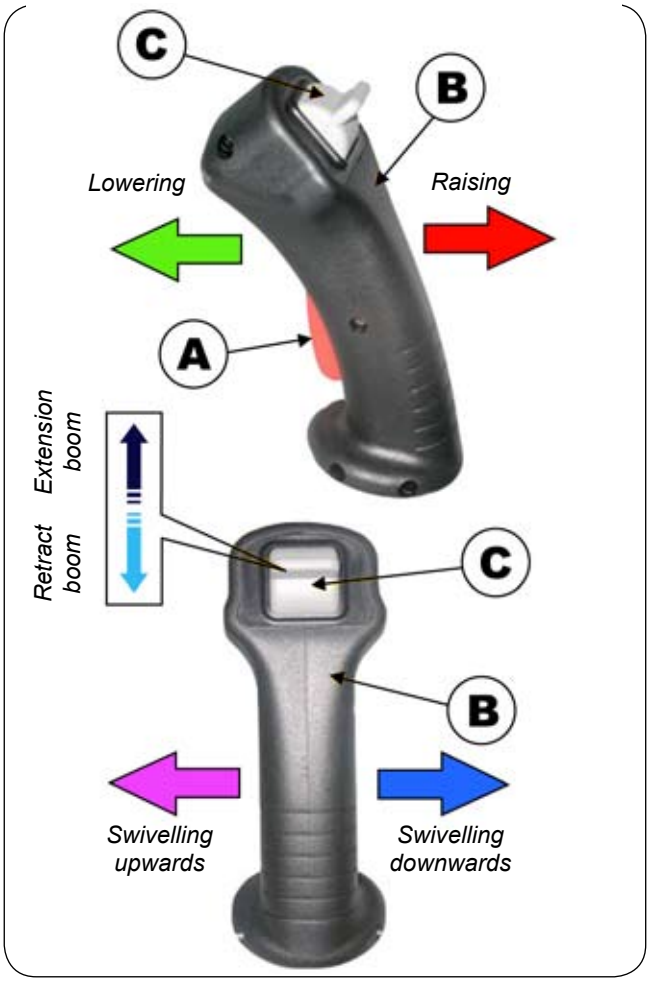
- Pull joystick "**B**"(fig.55/C) backward to raise the boom.
- Push joystick "**B**"(fig.55/C) forward to lower the boom.

Boom extension:

- Push the lever "**C**"(fig.55/C) forward to extend the boom.
- Push the lever "**C**" (fig.55/C) backward to retract the boom.

swivelling support attachment:

- Move the joystick to the right "**B**" (fig.55/C) to swing the support attachment downward.
- Move the joystick to the left "**B**" (fig.55/C) to swing the support attachment upward.



(fig.55/C)

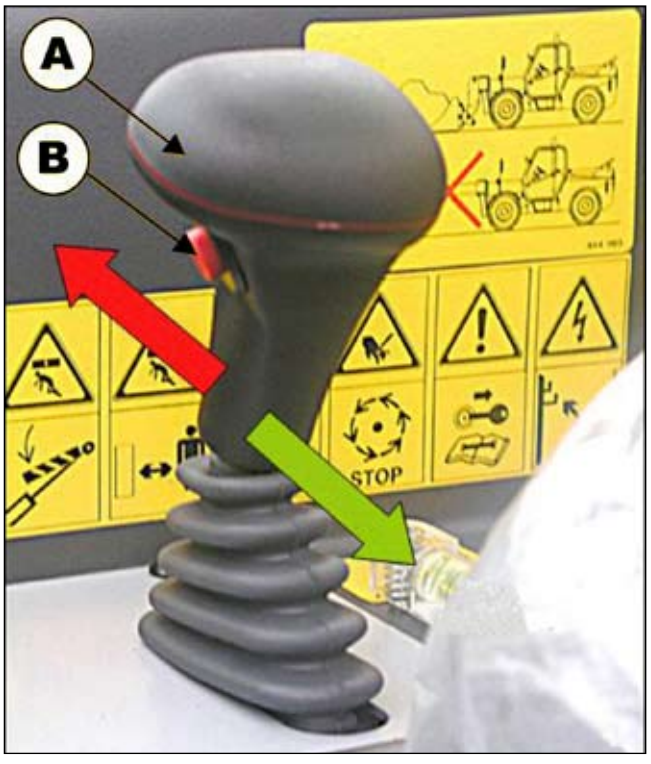
Service control lever

With 3 in 1 distributor installed, the vehicle is equipped with a second Joystick (fig.56/C pos."A") to control the services.

To make movements:

- Grip the Joystick "**A**" (fig.56/C),
- Press and hold button "**B**" (fig.56/C)
- Move Joystick "**A**" to the right/left (fig.56/C).

- ATTENTION:
before starting to operate the vehicle, check the functions and movements of the services Joystick "A" (fig.56/C). To check these functions, go to an area free of any obstacles to allow the movements to be checked without risk of damaging objects, people or animals.



(fig.56/C)

3 in 1 Proportional Extension Joystick (standard version)

(fig.57/C)

Before each manoeuvre, press and hold down the “man in” control lever ““**A**” (fig.57/C).

Boom manoeuvre:

- Pull joystick “**1**”(fig.57/C) backward towards letter “**B2**” (fig.57/C), to raise the boom.
- Push joystick “**1**”(fig.57/C) forward towards letter “**B1**” (fig.57/C), to lower the boom.

Boom extension:

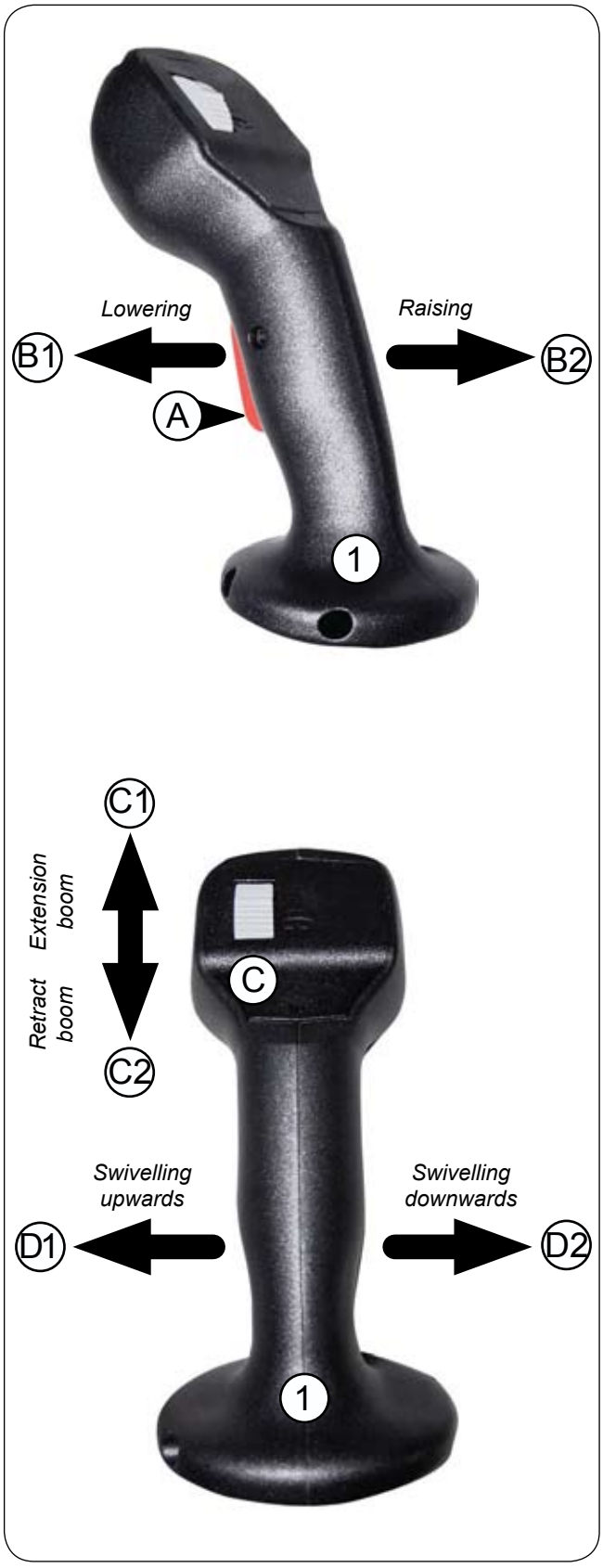
- Push the roller “**C**”(fig.57/C) forward towards the letter “**C1**”to extend the boom.
- Push roller “**C**” (fig.57/C) backward towards letter “**C2**” to retract the boom.

NOTE: the extension or retraction speed will be proportional to the movement of roller “**C**” (fig.57/C).

swivelling support attachment:

- Move joystick “**1**” (fig.57/C) right toward letter “**D2**” to swivel the support attachment downward.
- Move joystick “**1**” (fig.57/C) left toward letter “**D1**” to swing the support attachment upward.

NOTE: with 3 in 1 distributor installed, the vehicle is equipped with a second Joystick (fig.56/C pos.”A”) to control the services. For use, consult the **“Services control lever”** paragraph.



(fig.57/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

4 in 1 Proportional Control Extension Joystick
Proportional services
(fig.58/C)

Before each manoeuvre, press and hold down the “man in” control lever “**A**” (fig.58/C).

Boom manoeuvre:

- Pull joystick “**1**” (fig.58/C) backward towards letter “**B2**” (fig.58/C), to raise the boom.
- Push joystick “**1**” (fig.58/C) forward towards letter “**B1**” (fig.58/C), to lower the boom.

Boom extension:

- Push the roller “**C**”(fig.58/C) forward towards the letter “**C1**”to extend the boom.
- Push roller “**C**” (fig.58/C) backward towards letter “**C2**” to retract the boom.

Note: the extension or retraction speed will be proportional to the movement of roller “**C**” (fig.58/C).

swivelling support attachment:

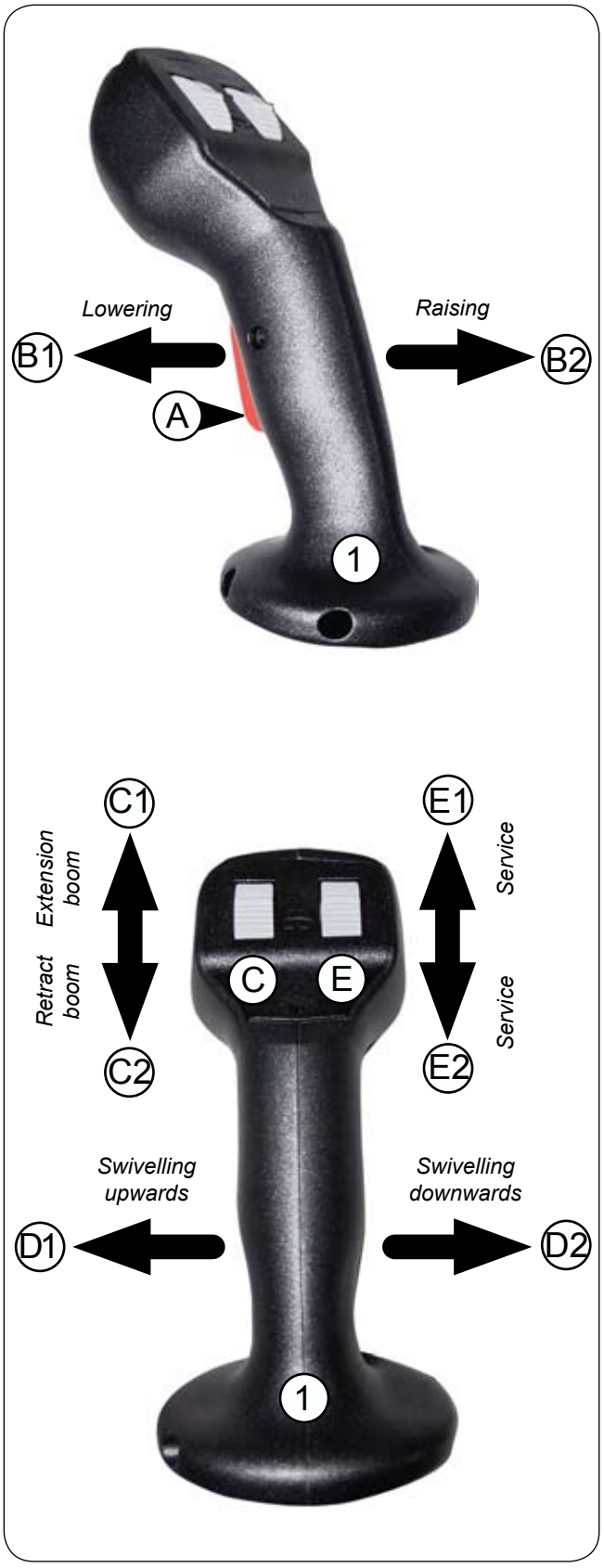
- Move joystick “**1**” (fig.58/C) right toward letter “**D2**” to swivel the support attachment downward.
- Move the joystick to the left towards the letter **D1**, (fig.58/C) to swing the support attachment upward.

Service controls:

- Push roller “**E**” (fig.58/C) forward, towards letter “**E1**” to extend the services.
- Push roller “**E**” (fig.58/C) backward towards letter “**E2**” to extend the services.

NOTE: when an electro-hydraulic attachment is installed, roller “**E**” is used to control service movements in accordance with the corresponding attachment manual.
The speed of the services movement will be proportional to the movement of roller “**E**”.

- ATTENTION:
before operating the vehicle, ensure that service roller “E” is working properly.
Work in an area free of any obstacles to allow so that movements can be checked without risk of damaging things, other people or animals.



(fig.58/C)

4 in 1 Proportional Control Extension Joystick Proportional services

(fig.59/C)

Before each manoeuvre, press and hold down the “man in” control lever “**A**” (fig.59/C).

Boom manoeuvre:

- Pull joystick “**1**”(fig.59/C) backward towards letter “**B2**” (fig.59/C), to raise the boom.
- Push joystick “**1**”(fig.59/C) forward towards letter “**B1**” (fig.59/C), to lower the boom.

Boom extension:

- Push the roller “**C**”(fig.59/C) forward towards the letter “**C1**”to extend the boom.
- Push roller “**C**” (fig.59/C) backward towards letter “**C2**” to retract the boom.

Note: the extension or retraction speed will be proportional to the movement of roller “**C**” (fig.59/C).

swivelling support attachment:

- Move the joystick “**1**” to the right towards the letter“**D2**”, (fig.59/C) to swing the support attachment downward.
- Move the joystick “**1**” to the left towards the letter“**D2**”, (fig.59/C) to swing the support attachment upward.

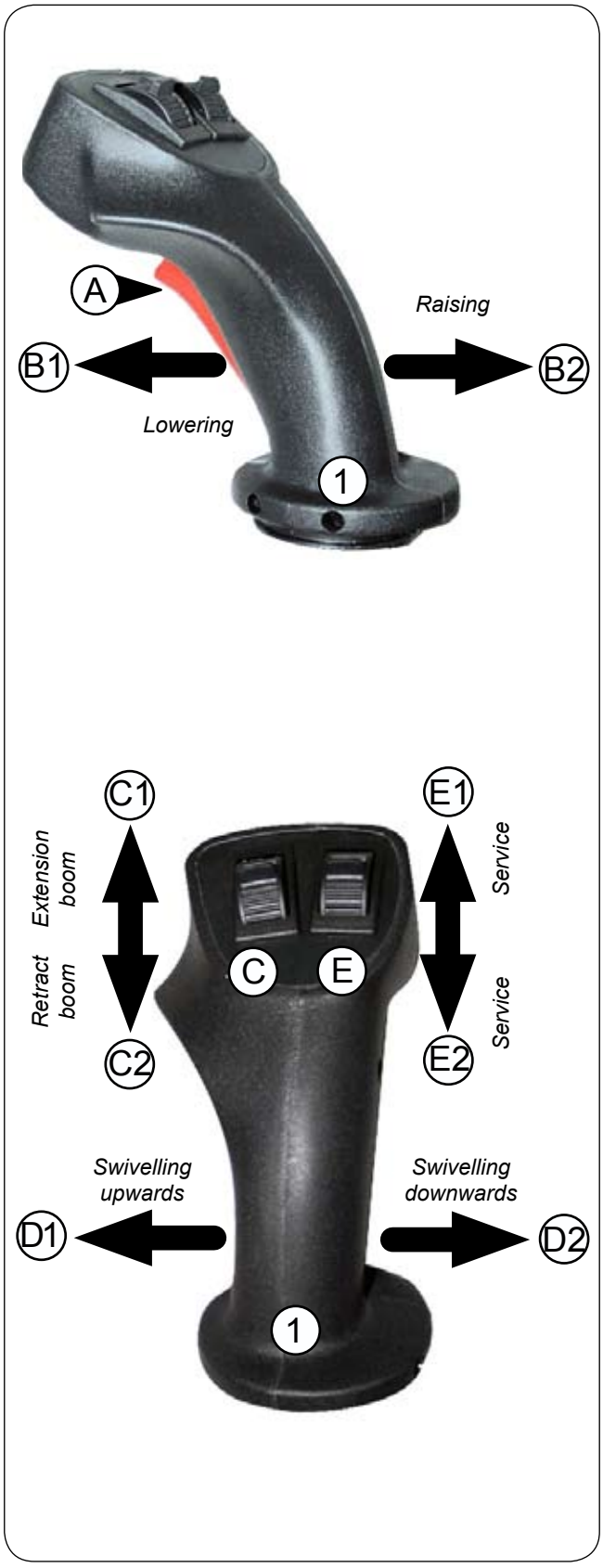
Service controls:

- Push roller “**E**” (fig.59/C) forward, towards letter “**E1**” to extend the services.
- Push roller “**E**” (fig.59/C) backward towards letter “**E2**” to extend the services.

NOTE: when an electro-hydraulic attachment is installed, roller “**E**” is used to control service movements in accordance with the corresponding attachment manual.
The speed of the services will be proportional to the movement of roller “**E**”.

- ATTENTION:

before operating the vehicle, ensure that service roller “E” is working properly.
Work in an area free of any obstacles to allow so that movements can be checked without risk of damaging things, other people or animals.



(fig.59/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

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DIECI

ROLL-OVER PROTECTION DEVICE
(fig.60/C)

⚠ - ATTENTION - ⚠

The “anti-tipping” device must **ALWAYS** be active, and the yellow key selector (fig.60/C Pos.”**1**”) set to “**ON**” (fig.60/C Pos.”**B**”). The yellow key can be turned to “**OFF**” (fig.60/C Pos.”**A**”) only when the boom is completely retracted.
With yellow key at “**OFF**” an acoustic signal is activated and the “general alarm” light switches on (fig.62/C Pos.”1”) both intermittently. The instrument will continue to indicate the state of the load but will no anti-tipping limitation device will intervene due to deactivation.

⚠ - ATTENTION - ⚠

The yellow “anti-tipping device” key must not be left on the vehicle. It must be kept by the Safety Manager

When the instruments are switched on, the device runs an automatic test. All LEDs switch on, indicators move and an audible signal is heard. If this is not the case, contact the ***DIECI*** after-sales network immediately.

The device detects the longitudinal stability conditions of the vehicle, measuring the residual load weighing on the rear axis.

The instrument has a scale of three colours that respectively indicate:

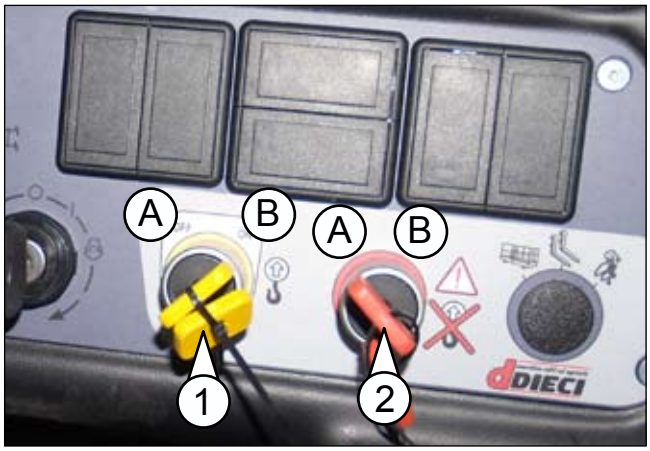
- Green “**A**”(fig.61/C), no acoustic signal; normal working conditions
- Yellow “**B**”(fig.61/C), no acoustic signal; pre-alarm conditions.
- Red “**C**”(fig.61/C), intermittent acoustic alarm; Load at tipping limit
- Red “**C1**”(fig.61/C), continuous acoustic alarm; tipping limit load, instrument full high scale.

The state of the load is signalled by the indicator “**D**” (fig.61/C) in correspondence of the colour on the scale. The intermittent acoustic signal that intervenes, on reaching the red zone “**C**”(fig.61/C) of the instrument, can be deactivated by pressing button “**E**” (fig.62/C).
The acoustic signal is automatically re-enabled on reaching the Red “**C1**”(fig.61/C) high full scale.

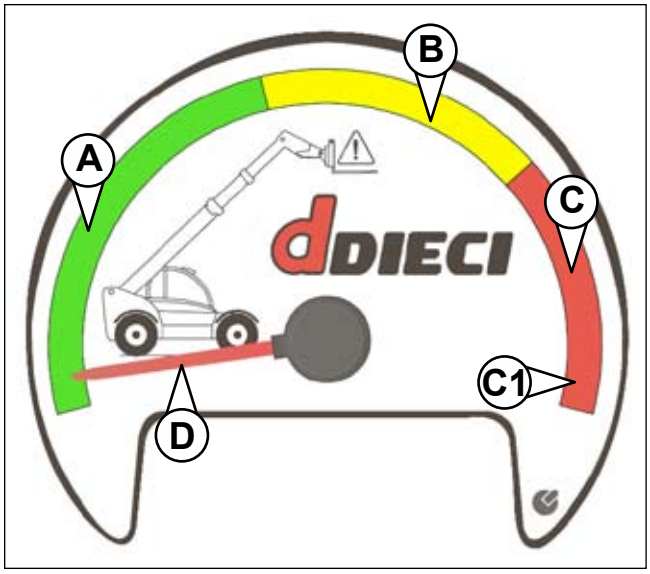
By pressing and holding button “**E**” (fig.62/C),the instrument performs a functioning test, repositioning itself on the indication of the current state of the load.

⚠ - ATTENTION - ⚠

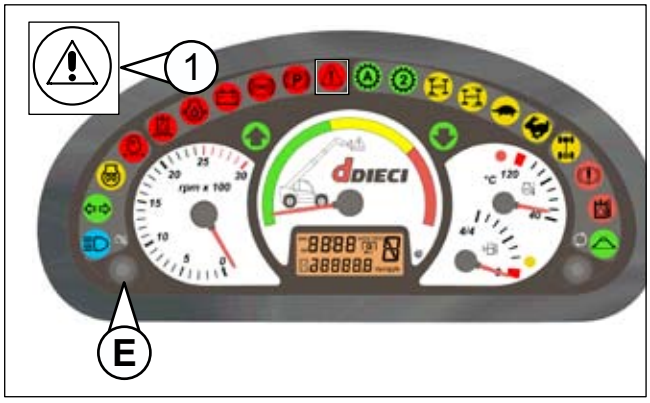
The test must be performed with vehicle at a standstill, unloaded, on flat horizontal ground, parking brake engaged, boom closed and lowered.



(fig.60/C)



(fig.61/C)



(fig.62/C)

⚠ - CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

In correspondence of the full high scale of the red part “C1” (fig.61/C), the alarm return selector is activated (fig.60/C Pos.”2”); the selector is the spring type.
When the load limit is reached (fig.61/C Pos.”C1”), the device blocks all vehicle movements.

In these conditions:

- Rotate the red key (fig.60/C Pos.”2”) to position “B” (fig.60/C) and keep it in this position.
- Retract or raise the boom, bringing the boom back to a safe position (see capacity diagram).
- Once the safety zone has been reached, the alarm will stop, the selector can be released.

- ATTENTION -

By turning the alarm return selector (fig.60/C Pos.”2”) to position “B” (fig.60/C) the antitipping systems are deactivated

<u>IT IS MANDATORY</u> to consult the load diagram (found in the cab regarding use and maintenance) before carrying out any manoeuvre. Using the inclinometer and the letters on the boom, the exact position of the boom can be determined. Do make any pejorative movements in these conditions or vehicle stability may be COMPROMISED causing overturning.

these operations can only be performed by qualified personnel that has been authorised by the Safety Manager.

VEHICLE FUNCTIONS SELECTOR (OPTIONAL)
(fig.63/C pos."1")

The vehicle possesses a "vehicle functions selector" (fig.63/C Pos."1") which must ALWAYS be set on the attachment to be used.

The selection categories are:

- **Handling objects (fork lift mode)**
  (fig.63/C Pos."B" forks symbol)

  Other accessories:
  Forks, buckets, mixing bucket, ladles.

- **Handling objects (crane mode)**
  (fig.63/C Pos."C" winch symbol)

  Other accessories:
  plate with lifting hook, winches, hoists, extension trestles, winches with extension trestles.

- Handling persons (elevation platform mode)
  (fig.63/C Pos."A" basket symbol)

  Other accessories:
  all man baskets.

The attachments applicable to the vehicles in question refer to the ***DIECI*** price list.

Select the attachment by turning the key. The selector is the type of key that provides the Safety Manager with the possibility of removing the key after having selected the tool, not allowing anyone else to use the selector.

- ATTENTION:
The selection of the "elevation platform mode" for lifting persons excludes the possibility of selecting steering different from that set.

- ATTENTION:
only use of ***DIECI*** original attachments is allowed. ***DIECI*** declines all responsibility for damage to the vehicle, people or things in cases where original attachments have not been used.

- ATTENTION:
Mounting attachments different that those approved by ***DIECI*** is prohibited.

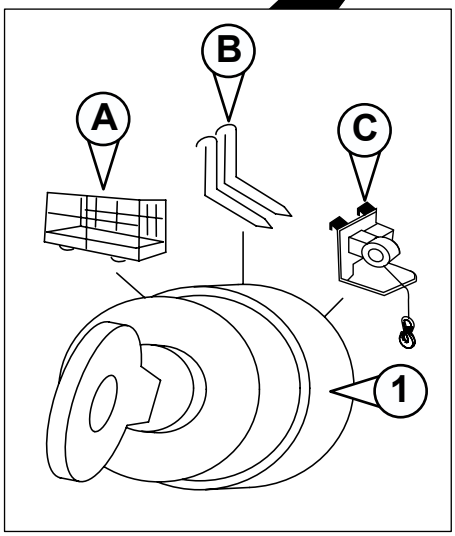
PROHIBITION

IT IS PROHIBITED to use the vehicle with different attachments from those selected using the "vehicle functions selector".

- ATTENTION -

THE BASKET CAN BE USED ROM THE CAB BY SETTING THE "VEHICLE FUNCTION SELECTOR" ON "FORKS" (FIG.63/C POS."B") ONLY TO TAKE THE BASKET TO THE GROUND IN THE EVENT THE OPERATOR IS FEELING ILL OR HAS BEEN HURT.

(fig.63/C)



- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

STANDARD STEERING SELECTOR
(fig.64/C Pos.”1”)

By moving the lever (fig.64/C Pos.”1”) 3 types of steering are obtained:

1 **Normal steering** (fig.65/C Pos.”B”)
This type of steering allows for **FRONT steering only.**
To activate front steering, move lever “1” (fig.64/C) to position “b” (fig.65/C) shown on the functions sticker.

2 **Beam steering** (fig.65/C Pos.”A”)
This type of steering allows for **maximum right steering to the right and the left.**
To activate beam steering, move lever “1” (fig.64/C) to position “A” (fig.65/C) shown on the functions sticker.

3 **Crab steering** (fig.65/C Pos.”C”)
This type of steering allows for crab steering, **front and rear parallel wheels** (sideways movement of vehicle).
To activate crab steering, move lever “1” (fig.64/C) to position “C” (fig.65/C) shown on the functions sticker.

- ATTENTION -
Steering selection is done when the vehicle is stopped.

- ATTENTION:

For road travel **IT IS MANDATORY** to position the steering control selector in Position “A” (fig.65/C) blocked using the relevant retainer (fig.64/C Pos.”2”); (“normal” front only steering mode).

- ATTENTION:

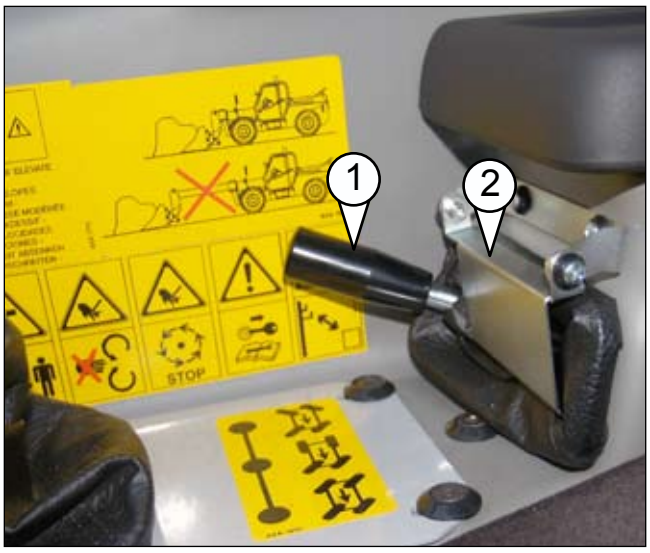
Before selecting a new steering type, align the wheels as explained in the procedure below. Wheel alignment must also be performed with the vehicle at a standstill.

Alignment (standard)

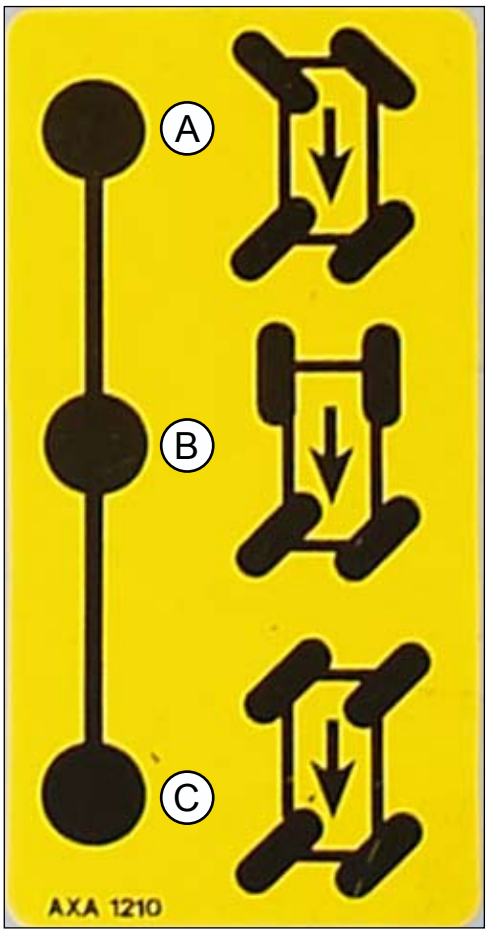
1. Position the lever “1” (fig.64/C)in the position marked with “A” (fig.65/C) on the functions sticker of steering.
2. Turn the steering wheel, until the rear wheels have been completely straightened.
3. Position the lever “1” (fig.64/C) on the position marked with “B” (fig.65/C) on the functions sticker of steering .
4. Turn the steering wheel, until the front wheels have been completely straightened.
5. At this point, the front and rear wheels are aligned and the desired steering type can be selected.

- ATTENTION:

Periodically it is advisable to align the wheels (8-10 hours) depending on the continued use of the vehicle.



(fig.64/C)



(fig.65/C)

STEERING SELECTOR (OPTIONAL)

(Fig.66/C Pos."1")

By turning the selector (fig.66/C Pos."1") 3 types of steering:

1 **Normal steering** (fig.67/C Pos."A")
This type of steering allows for **front steering only**.
To activate front steering, turn selector "1" (fig.66/C) to position "A" (fig.67/C) shown on the functions sticker.

2 **Beam steering** (fig.67/C Pos."B")
This type of steering allows for **maximum right steering to the right and the left.**
To activate beam steering, turn selector "1" (fig.66/C) to position "b" (fig.67/C) shown on the functions sticker.

3 **Crab steering** (fig.67/C Pos."C")
This type of steering allows for crab steering, **front and rear parallel wheels** (sideways movement of vehicle).
To activate crab steering, move lever "1" (fig.66/C) to position "C" (fig.67/C) shown on the functions sticker.

- ATTENTION -

Steering selection is done when the vehicle is stopped.

- ATTENTION:

For road travel it is mandatory to position the steering control selector in Position "A" (fig.67/C) blocked using the relevant retainer (fig.67/C Pos."2"); ("normal" front only steering mode).

- ATTENTION:

Before selecting a new steering type, align the wheels as explained in the procedure below. Wheel alignment must also be performed with the vehicle at a standstill.

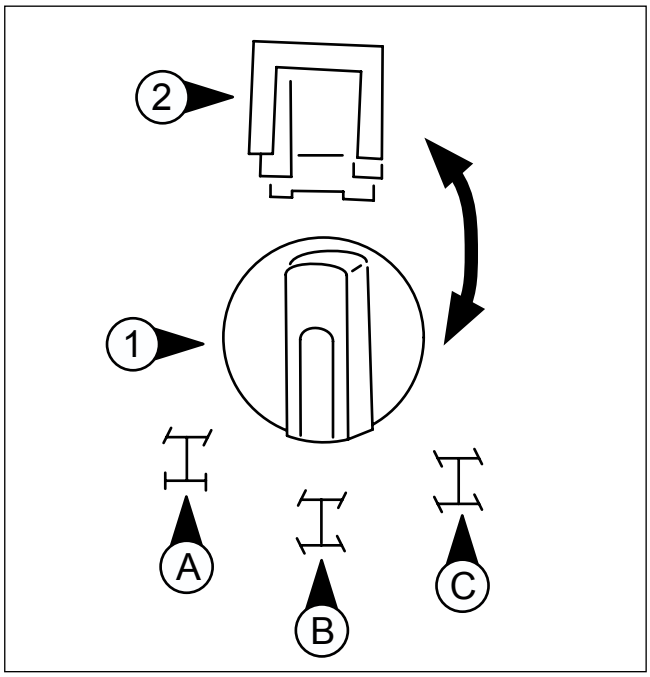
Alignment (standard)

1. Position the lever "1" (fig.67/C)in the position marked with "B" (fig.67/C) on the functions sticker of steering.
2. Turn the steering wheel, until the rear wheels have been completely straightened.
3. Position the lever "1" (fig.67/C)in the position marked with "A" (fig.67/C) on the functions sticker of steering .
4. Turn the steering wheel, until the front wheels have been completely straightened.
5. At this point, the front and rear wheels are aligned and the desired steering type can be selected.

- ATTENTION:

Periodically it is advisable to align the wheels (8-10 hours) depending on the continued use of the vehicle.

(fig.66/C)



(fig.67/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

WHEELS ALIGNMENT INDICATOR CONSENT (OPTIONAL)

(fig.68/C Pos.”1”)

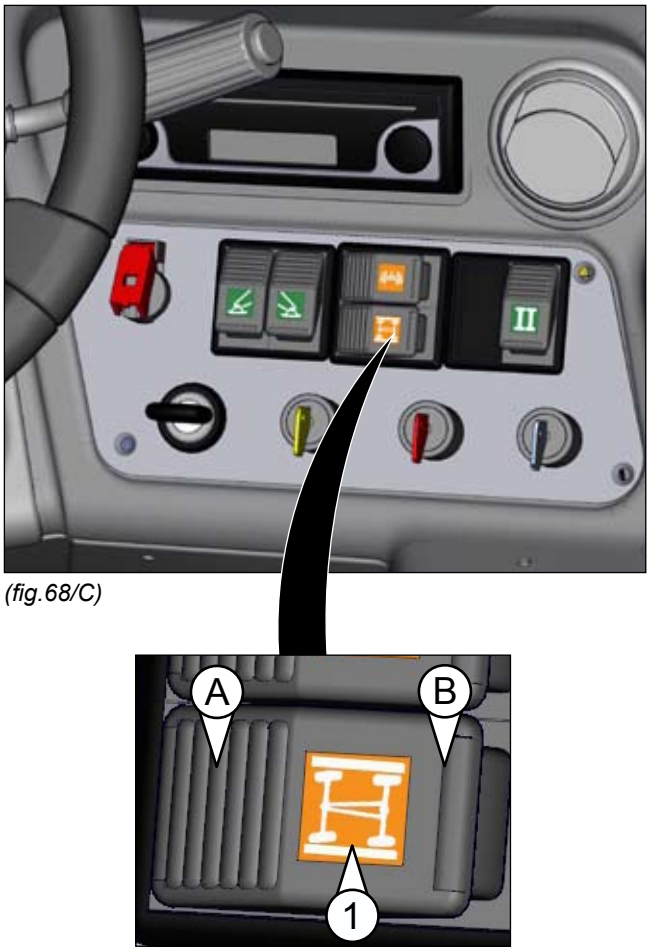
The dashboard indicator lights (fig.69/C Pos.”1-2”) indicate the alignment of the wheels and chassis. To enable the function, act on switch “1” (fig.68/C).

Front wheel alignment:

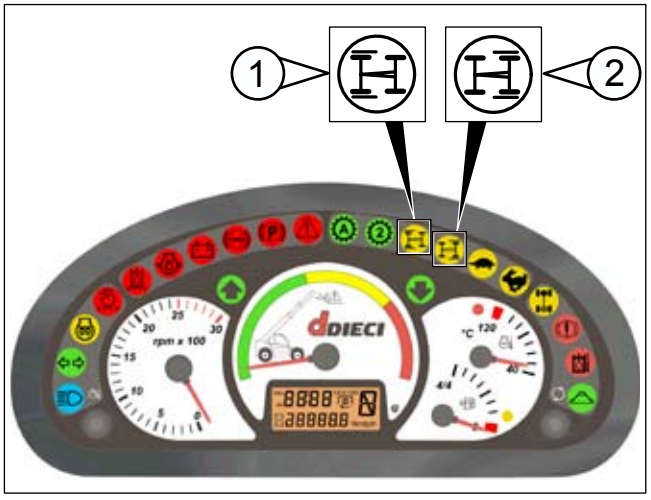
- Press and hold the switch on side “A” (fig.68/C).
- Turn the steering wheel to move the front wheels.
- The switch-on of indicator light “1” (fig.69/C) signals that the front wheels are aligned with the chassis.

Rear wheel alignment:

- Press and hold the switch on side “B” (fig.68/C).
- Turn the steering wheel to move the front wheels.
- The switch-on of indicator light “2” (fig.69/C) signals that the front wheels are aligned with the chassis.



(fig.68/C)



(fig.69/C)

REAR WINDSCREEN WIPER CONTROLS
(fig.70/C Pos.”1”)

- Use the selector to activate (fig.70/C Pos.”1”).
- Press and hold the selector to activate rear windscreen wipers.

The selector indicator light switches on to indicate successful activation.

- ATTENTION:

Worn blades may obstruct vision and scratch the glass.

(fig.70/C)

EMERGENCY LIGHTS SELECTOR
(fig.71/C Pos.”1”)

Use the selector (fig.71/C Pos.”1”) to activate emergency lights (direction indicators are fully lit in flashing mode).

The selector indicator light switches on to indicate successful activation.

(fig.71/C)

MANUAL ACCELERATOR
(fig.72/C Pos.”1”)

- ATTENTION:

Engage the parking brake (Pag.C/30) and neutral gear (Pag.C/26) before acting on the lever to increase motor revs.

Allows the operator to accelerate engine RPMs and keep them constant without pressing the accelerator pedal.

- Act by moving the lever towards the front of the vehicle
- Act by moving the lever toward the rear of the vehicle to decrease engine revs.

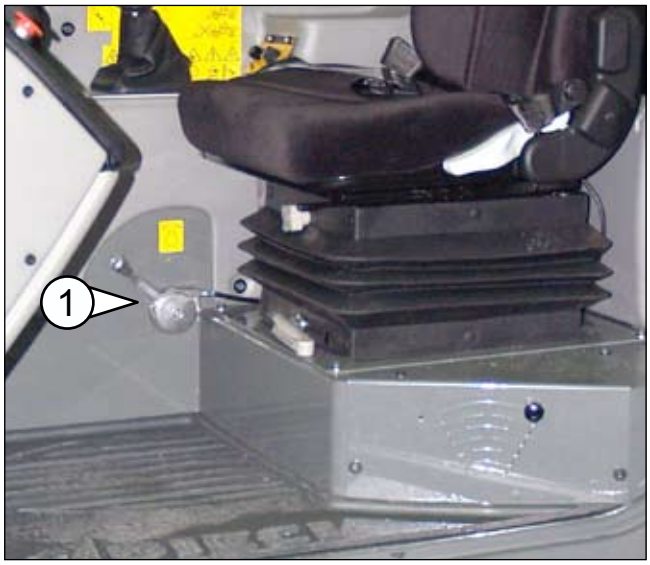
- ATTENTION:

When the vehicle must be switched off, the engine RPMs must be reduced to a minimum.

- ATTENTION:

Increasing RPMs, the vehicle may move without accelerator pedal having been pressed.
Use the manual accelerator only when using the vehicle with the parking brake engaged and idle gear.

Always bring the manual accelerator(fig.72/C Pos.”1”) to the starting position (engine at minimum RPMs) before disengaging the parking brake. The vehicle may start suddenly, causing risk of damage.



(fig.72/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

INTERNAL CAB VENTILATION

To activate ventilation, turn knob “1”.
(fig.73/C).

The clicks indicate, respectively:

0 - Off

1 - First speed

2 - Second speed

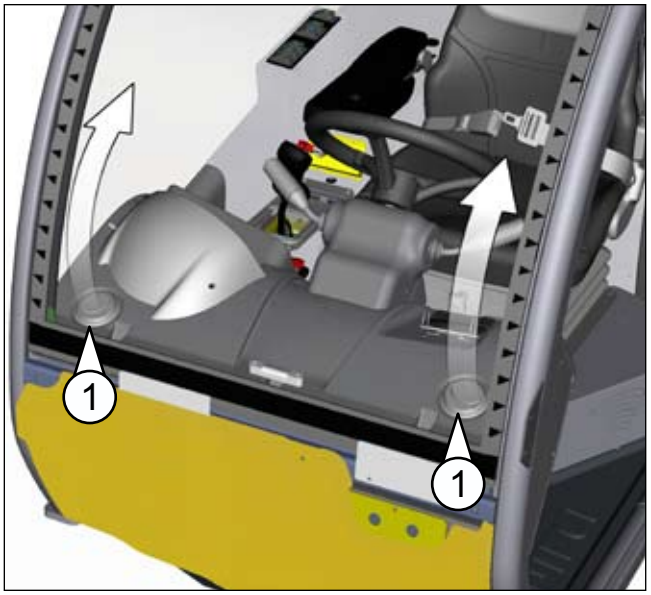
3 - Third speed

- To open the air vents (fig.74/C, fig.75/C,fig.76/C) press down on one side of the vent and adjust the air flow direction with the tabs or turning the vent itself.
- To close the vents, push the tabs until they are in a horizontal closed position.
- To regulate the front air flow, act on the vents “1” (fig.74/C) and ”2” (fig.75/C).
- To regulate the lower air flow, act on the vents “1” (fig.75/C).
- To regulate the rear air flow, act on the vents “1” (fig.76/C).

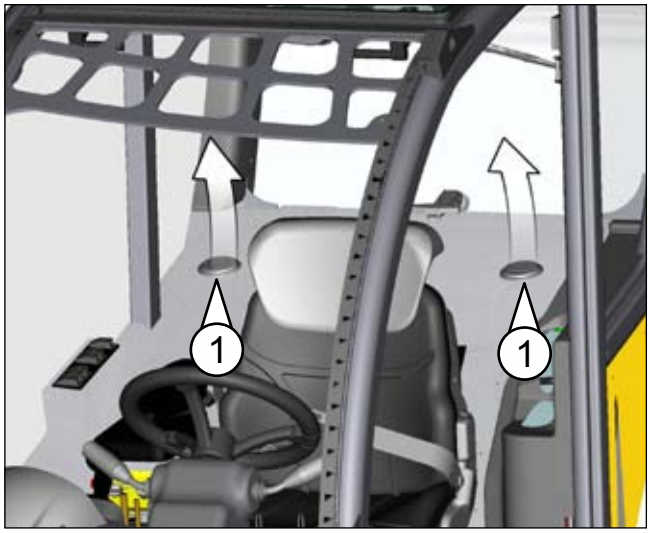
Air temperature adjustment

To adjust the temperature of the air coming from the vents, turn the knob (fig.73/C Pos.”A”).
Turning the knob clockwise (in the red part of the scale) the temperature increases. Turning the knob anti-clockwise (in the blue part of the scale) the temperature decreases until it is near the external temperature.

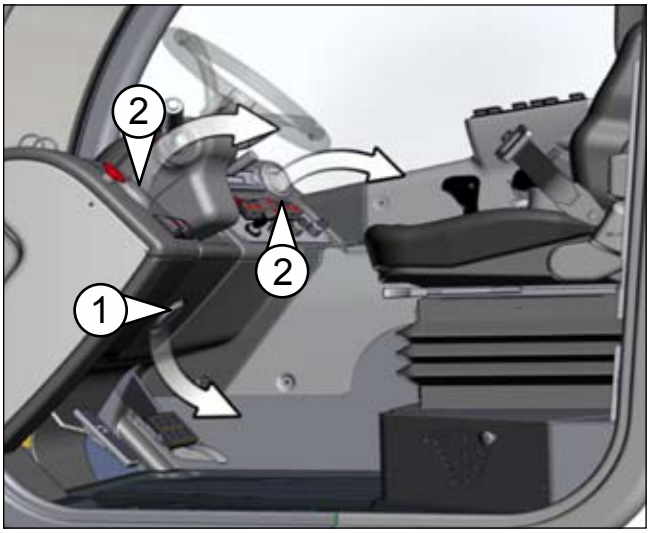
(fig.73/C)



(fig.74/C)



(fig.76/C)



(fig.75/C)

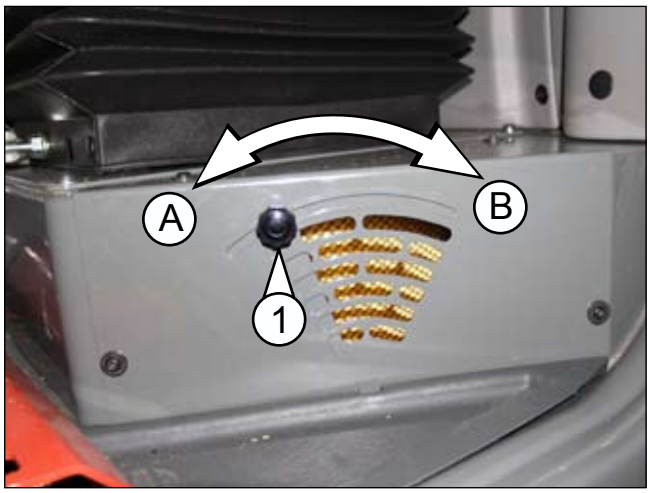
AIR RECIRCULATION INSIDE THE CAB
(fig.80/C Pos.”1”)

- Take the knob to position “A” (fig.80/C) to enable air recirculation inside the cab.

- Take the knob to position “B” (fig.80/C) to disable air recirculation inside the cab and allow the ventilation system to take in air from the outside.

NOTE:

The lever acts on the “suction” of air by the ventilation system. The flow of the air and the temperature must always be controlled by the ventilation system inside the cab.



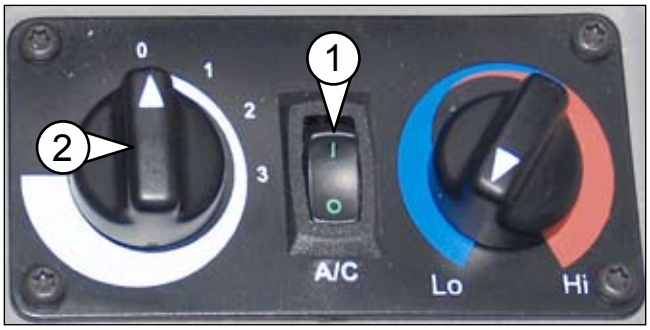
(fig.80/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

AIR CONDITIONING (OPTIONAL)

System operation:

1. Check that all doors and windows are closed.
2. Ensure that the heater is switched off, turning the lever towards the “blue” part of the scale.
3. With the engine on, switch on the air conditioning by pressing the switch (fig.81/C Pos.”1”) taking it to position “I”.
4. Act on the fan (fig.81/C Pos.”2”) to select the air flow.
5. Open and adjust vents to obtain ideal cooling with regard to environment temperature. Increase or decrease fan speed to obtain desired conditions.
6. Turning the knob anti-clockwise (in the red part of the scale) the temperature increases. Turning the knob anti-clockwise (in the blue part of the scale) the temperature decreases.



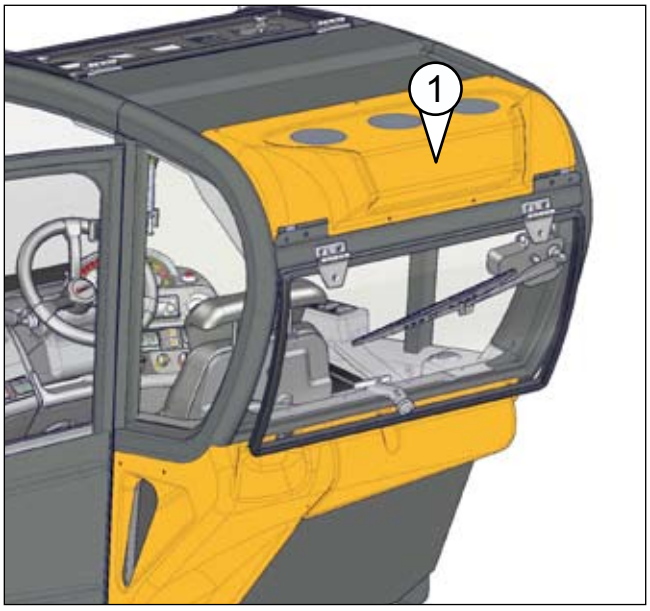
(fig.81/C)

- ATTENTION:

Switch on the air conditioning every 15 days, even in the colder months, with the engine running at minimum (without accelerating). In this way, the moveable parts like the compressor and the general system can be lubricated.

- ATTENTION:

Keep the condenser clean to keep the conditioning system working efficiently (fig.82/C Pos.”1”).



(fig.82/C)

- ATTENTION:

DO NOT loosen any of air conditioning system’s tubes in order to reach the condenser, because skin contact with coolant can cause freezing.

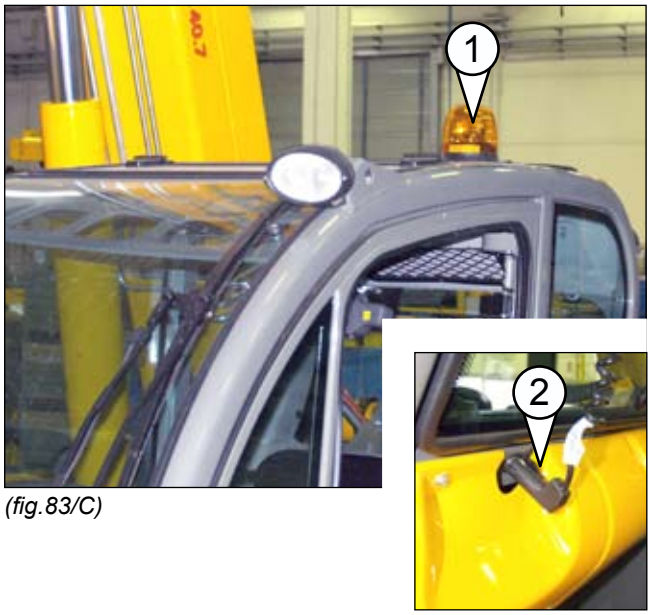
- ATTENTION:

consult chapter “D” for system cleaning and maintenance.

REVOLVING LIGHT SWITCH
(fig.83/C Pos.”1”)

The revolving light must always be positioned above the driver’s cab (fig.83/C Pos. “1”) and must always be in operation both at the work site and when driving on roads.

- Position the revolving light on the driver’s cab (fig.83/C Pos.”1”).
- Plug the power plug in the socket at the rear of the cab (fig.83/C Pos.”2”).
- To switch on the revolving light push the button ”B” (fig.84/C). The indicator light on the same switch indicates start-up.



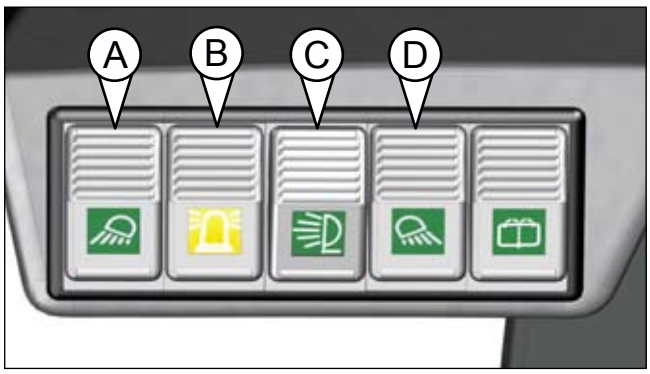
(fig.83/C)

- ATTENTION:
The vehicle can only mount lights supplied by dieci and in compliance with the Standards in force in the country of use. Danger of damage to the electrical system.

- ATTENTION:
Do not connect users with nominal voltage exceeding 12 volts and power consumption exceeding 180W.
Danger of damage to the electrical system.

FRONT CAB LIGHTS SWITCH (OPTIONAL)
(Fig.84/C Pos.”A”)

Use the switch (fig.84/C Pos.”A”) to turn on the front cab working lights (fig.85/C Pos.”1”). The indicator light switches on to indicate successful activation.



(fig.84/C)

- ATTENTION:
The vehicle can only mount lights supplied by ***DIECI***. Danger of damage to the electrical system.

REAR CAB LIGHTS SWITCH (OPTIONAL)
(fig.84/C Pos.”D”)

Use the switch (fig.84/C Pos.”d”) to turn on the rear cab working lights (fig.85/C Pos.”2”). The indicator light switches on to indicate successful activation.

(fig.85/C)

- ATTENTION:
The vehicle can only mount lights supplied by ***DIECI***. Danger of damage to the electrical system.

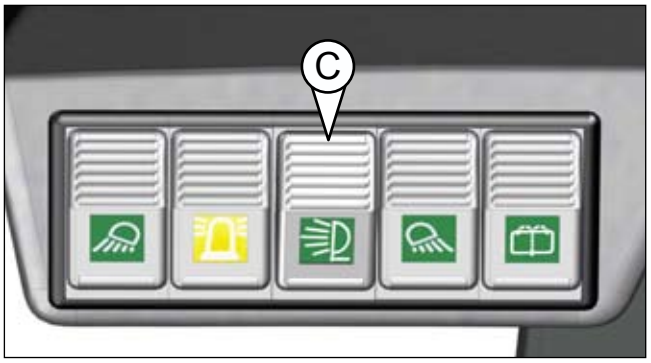
- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

BOOM HEAD LIGHTS CONSENT (OPTIONAL)
(fig.86/C Pos.”C”)

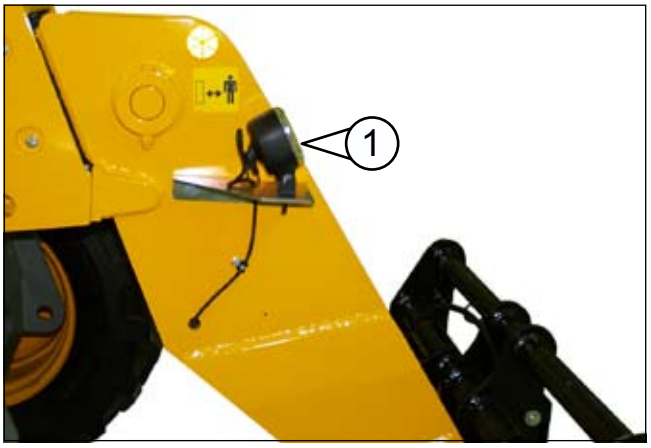
Use the relevant switch (fig.86/C Pos.”C”) to turn on the boom head light (fig.87/C Pos.”1”). The indicator light switches on to indicate successful activation.

Two work lights, one on the right side and the other on the left side of the boom, can be installed upon client request.

- ATTENTION:
The vehicle can only mount lights supplied by ***DIECI***. Danger of damage to the electrical system.



(fig.86/C)



(fig.87/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

LEVELLNG
FRONT DIFFERENTIAL AXLE
(OPTIONAL)

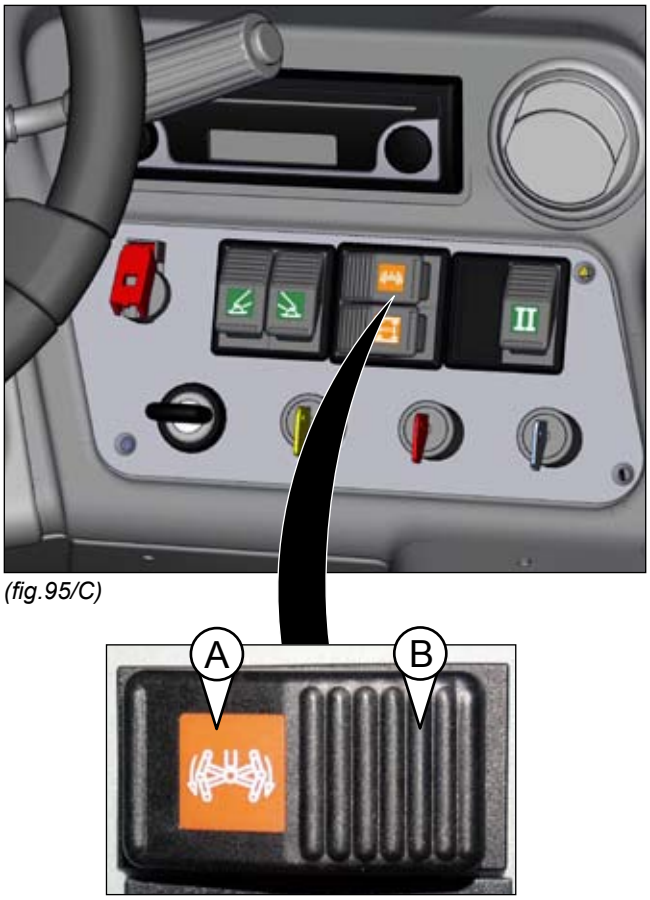
Using levelling of the front differential axle it is possible to align the vehicle with the horizontal work surface. Always check correct levelling using the spirit level in the cab (fig.96/C Pos.“1“).

The correct sequence to be used for levelling is the following:

1. Place any load on the ground.
2. Lower and completely retract the telescopic boom.
3. Level the vehicle by acting on the relative switch:
   - Press the selector in part “A” (fig.95/C) to level the vehicle to the left (fig.98/C).
   - Press the selector in part “B” (fig.95/C) to level the vehicle to the right (fig.97/C).

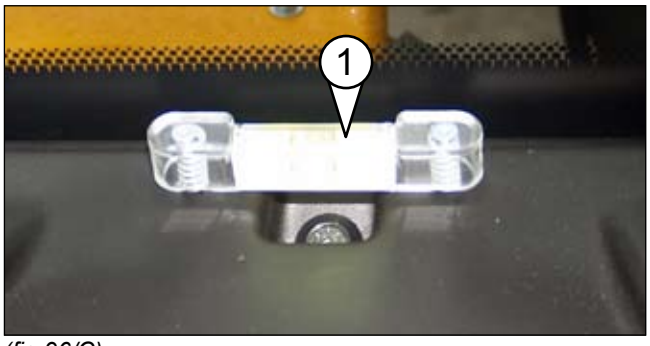
PROHIBITION

<u>IT IS PROHIBITED</u> to operate with transversal inclination exceeding 2°.
(see page C/31)



(fig.95/C)

(fig.97/C) (Levelling right part of the vehicle)



(fig.96/C)

(fig.98/C) (Levelling left part of the vehicle)

BOOM HEAD SOLENOID VALVE (OPTIONAL)
(fig.102/C Pos.”1”)

The switch (fig.101/C Pos.”1”) is only installed in the presence of the boom head solenoid valve (fig.102/C Pos.”1”). When using the solenoid valve it is possible to have divided hydraulic controls on the boom head.

- Activate the switch (fig.101/C Pos.”A”) to power the solenoid valve, which will deviate oil flow. The indicator light on the same switch indicates start-up.

The selector (fig.101/C Pos.”1”) is used parallel to normal service controls. First, choose the selector where oil flow will deviate from, then carry out manoeuvres with the routine service controls.

BOOM HEAD SOLENOID VALVE (OPTIONAL)
(fig.101/C Pos.”2”)

The switch (fig.101/C Pos.”2”) is only installed in the presence of the boom head socket (fig.102/C Pos.”2”). In presence of the socket, but not its switch, this is only used to power the boom head solenoid valve.

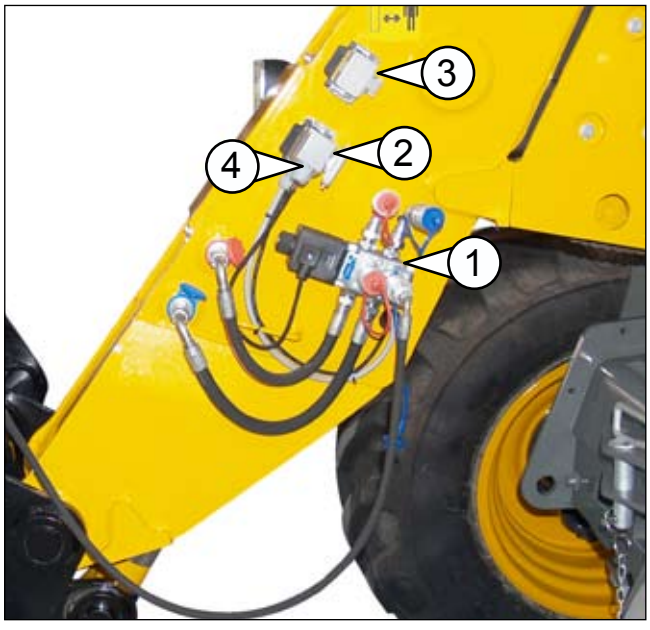
To use the socket:

- Remove any plug inserted in the socket (fig.102/C Pos.”4”) and insert it into the socket-holder (fig.102/C Pos.”3”).
- Insert the user plug into the boom head socket (fig.102/C Pos.”2”).
- Activate the switch (fig.101/C Pos.”2”) to power the plug and user connected. The indicator light on the same switch indicates start-up.

- ATTENTION:
On connection of the user, before starting work operations, in a safe place check that all controls function correctly and perform the desired manoeuvres/operations.

- ATTENTION:
Do not connect users with nominal voltage exceeding 12 volts and amperage over 3A.
Danger of damage to the electrical system.

(fig.101/C)



(fig.102/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

REAR HYDRAULIC SOCKETS (OPTIONAL)
(fig.106/C Pos.”1”)

Located at the rear of the vehicle (fig.106/C Pos.”1”).

- Press the relative switch to deviate oil to the rear hydraulic sockets (fig.103/C Pos.”1”). The indicator light on the same switch indicates start-up.

The rear hydraulic sockets operate using the Joystick service controls in the cab.

Note: The switch can have 2 or 3 positions in relation to set-up.

- ATTENTION:

On connection of the user, before starting work operations, in a safe place check that all controls function correctly and perform the desired manoeuvres/operations.

(fig.103/C)

“Continuous oil” function

The function allows to select and maintain the volume of oil transiting in the hydraulic sockets constant, without acting constantly on the Joystick selector.

- Press the relative switch to deviate oil to the rear hydraulic sockets (fig.103/C Pos.”1”).
- Select the volume of oil to keep constant through the Joystick Roller (fig.104/C Pos.”1”)
- Press the “Power take-off” selector (fig.103/C Pos.”3”) to enable the “continuous oil” function.
  The flashing LED on the Joystick (fig.104/C Pos.”2”) indicates activation.
- To disable the function, intervene on the “Power take-off” switch (fig.103/C Pos.”3”).

To make other operations/movements with the Joystick, in “Continuous oil” mode, active:

- Press the “man in” button (fig.105/C Pos.”1”).
- Moving the joystick to make the desired operation.

Operating in this way, the above-mentioned function remains active.

- ATTENTION:

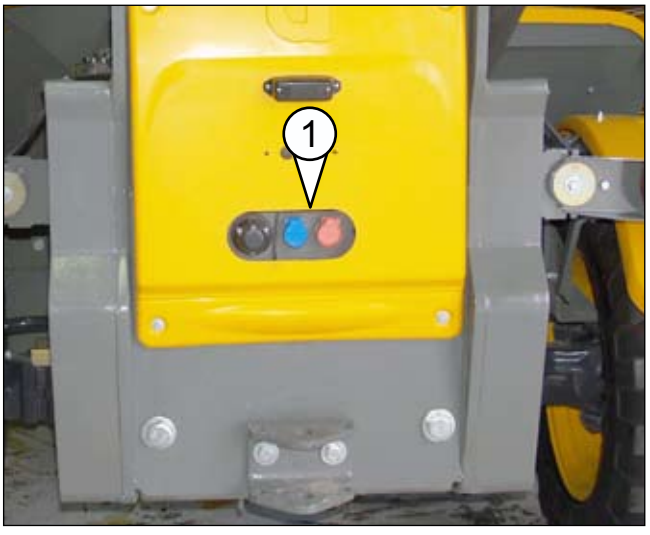
Movement of the joystick, without intervention on the roller “1” (fig.105/C), with “continuous oil” function enabled leads to the temporary disconnection of the function itself.

- ATTENTION:

With “Continuous oil” function enabled, do not move away from the driver’s cab.

(fig.104/C)

(fig.105/C)



(fig.106/C)

2-SPEED BOOM (OPTIONAL)

The dual speed of the boom allows the operator to increase boom movements speed.

Activate dual speed using the switch (fig.108/C pos.”1”). Switch on of the indicator light on the same switch indicates running.

When the 180 bar pressure has been exceeded, the second speed will deactivate automatically.

(fig.108/C)

BOOM SUSPENSION (OPTIONAL)

Boom suspension allows the operator to carry out movements with the vehicle without feeling the strong oscillations and jumps caused by the boom, in the event that the ground is not perfectly flat.

Use the relevant switch to engage boom suspension (fig.110/C Pos.”1”). The indicator light on the same switch indicates start-up.

Boom suspension is activated only if the boom is in the horizontal position.
Boom suspension is deactivated automatically by pressing the “man in” button on the joystick.

Suspension can also be used during the transport of loads with the boom in the transport position (completely retracted and in a horizontal position).

- ATTENTION:

The presence of boom suspension does not cause an increase in the speed of vehicle transport or movement. Speed must always be proportional to the ground, to the area of use and to climatic conditions. The vehicle must always be used with caution. Always refer to instructions detailed in chapter “B”.

- ATTENTION:

Boom suspension is a device which helps increase vehicle comfort but does not increase vehicle safety features.

(fig.110/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

DUMP BODY LOWERING (OPTIONAL)

The dump body lowering switch controls the solenoid valve which causes the closure of the dump body lifting cylinder connected to the rear hydraulic socket.

Activate dump body lowering using the relevant switch (fig.111/C pos.”1”). The indicator light on the same switch indicates start-up.

- ATTENTION:

Before moving the vehicle with the dump body:

- Verify its correct operation (brake system, signalling system, hydraulic system).
- Verify that the dump body conforms to all laws relevant in country where the vehicle is being used.

- ATTENTION:

When handling the dump body (lifting, lowering, moving), verify that no one is nearby. RISK of being crushed.

(fig.111/C)

REVERSIBLE FAN (OPTIONAL)

Activate reversible fan using the relevant button (fig.111/C pos.”2”). The cleaning cycle is activated automatically by pressing the switch, which must not be held. Reversal takes place automatically without having to switch off the vehicle. The fan remains in the “cleaning” position (engine reversed) for a pre-set amount of time determined by the manufacturer.

- ATTENTION:

The presence of fan reversal does not prevent operators from carrying out fan, radiator or engine compartment cleaning, in accordance with the required routine maintenance schedule.

WATER HEATER (OPTIONAL)
(fig.112/C Pos."1")

Located at the rear of the bonnet.

- ATTENTION:

Before switching on the water heater, carry out the operations included in Chapter B "STOPPING UPON COMPLETION OF WORK"

System operation:

1. Plug in connector "A" into socket "B" located in the rear part of the engine bonnet (fig.113/C).
2. Insert plug "C" into the electric socket (fig.113/C).

The heater is connected to its own control unit and maintains engine water at a temperature higher than the external temperature (in cold climates).

In the event of malfunction contact a ***DIECI*** service centre.

- ATTENTION:

Verify the good conditions of the power supply cable before starting up the device.

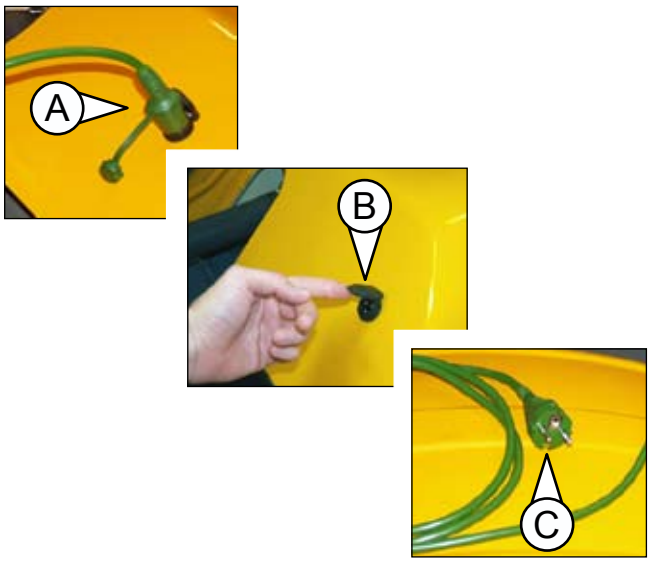
- ATTENTION:

Do not use the water heater with the engine on and while the vehicle is moving.

- ATTENTION:

Remove water heater power supply before switching on and moving the vehicle.

(fig.112/C)



(fig.113/C)

macchine edili ed agricole
DIECI

FRONT HOOK
(fig.120/C Pos.”A”)

If located at the front of the vehicle, it can have different load capacities depending on client needs.
To check the capacity of the front hook, consult the vehicle registration document.

Capacity is limited for each vehicle by the authorised circulating weight, by the towing weight and by the vertical strain of the towing pin. This information is detailed in the vehicle registration document.

The front hook clip (fig.120/C Pos.”1”) has been properly positioned and locked when the guide pin is in position “3” (fig.120/C) and is locked by its cotter pin “2” (fig.120/C).

(fig.120/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

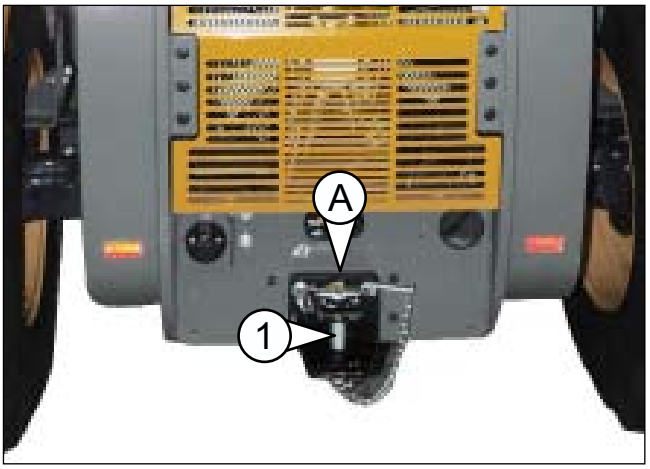
TOWING HOOK
(fig.121/C Pos.”A”)

If located at the rear of the vehicle, it can have different load capacities depending on client needs.
Consult the vehicle registration document to verify rear hook load capacity.

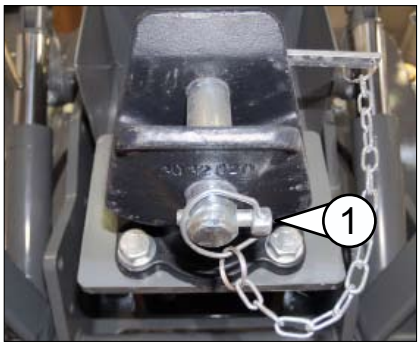
Capacity is limited for each vehicle by the authorised circulating weight, by the towing weight and by the vertical strain of the towing pin. This information is detailed in the vehicle registration document.

Only “Agricultural Tractors” are permitted to driving on the road with a trailer.

Verify proper locking pin position before moving the vehicle with the trailer.
The rear hook clip (fig.121/C Pos.”1”) has been properly positioned and locked when it goes through both parts of the hook (fig.122/C) and is locked by its cotter pin “1” (fig.122/C).



(fig.121/C)



(fig.122/C)

⚠ - *ATTENTION:*

Before moving the vehicle with the trailer:

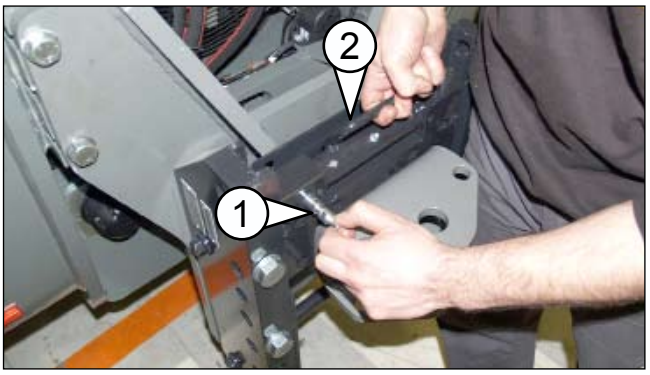
- Ensure that the brake and signalling systems are functioning properly.
- Verify that the trailer conforms to regulations in force in the country where the vehicle is being used.
- Make sure that the cotter pin is properly inserted inside the pin (fig.122/C Pos.”1”).

ADJUSTABLE TOWING HOOK (OPTIONAL)
(fig.124/C Pos.”A”)

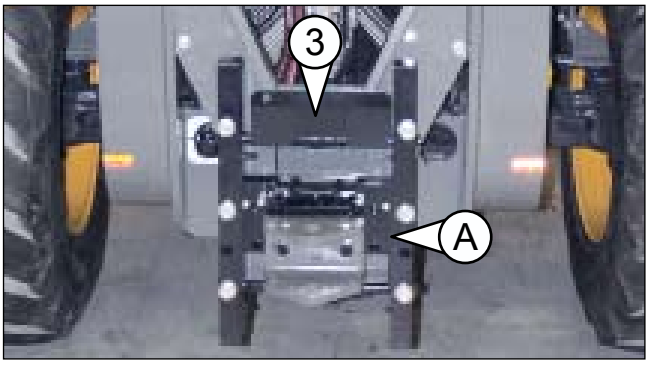
Located at the rear of the vehicle.

To adjust hook height:

1. Grip the pin (fig.123/C Pos.”1”) keeping i pulled towards yourself.
2. Lift the handle with safety lock (fig.123/C Pos.”2”). In these conditions the hook is free to move in its own guides.
3. Lower or raise the hook accompanying it via the handle (fig.123/C Pos.”2”).
4. When the desired position has been reached, release the pin (fig.123/C Pos.”1”); check that the pin returns to its house, release the safety handle (fig.123/C Pos.”2”).
5. Insert the protection (fig.124/C Pos.”3”) taking it to horizontal position.



(fig.123/C)



(fig.124/C)

⚠ - *ATTENTION:*

To use the “adjustable towing hook” the prescriptions are the same as in the “Towing hook” paragraph.

POWER TAKEOFF (OPTIONAL)
(fig.131/C pos."1")

To activate the power take-off, act on its switch (fig.130/G pos."1").
The indicator light on the relevant switch will signal start-up.
The PTO pump has hydraulic connections that are independent from the rest of the vehicle hydraulic plant. Before activating the PTO, check that the hydraulic supply pipes are connected.

If this is not the case, act as follows:

- Stop the vehicle on a flat, level surface.
- Switch off the engine and remove the key from the dashboard.
- Discharge the pressure from the hydraulic plant by moving the Joystick in the cab.
- Insert the pump hydraulic pumps of the PTO in the hydraulic connections on the rear of the vehicle (fig.132/C pos."2").
- Once the pump is connected to the plant, it is possible to start the vehicle and activate the PTO.

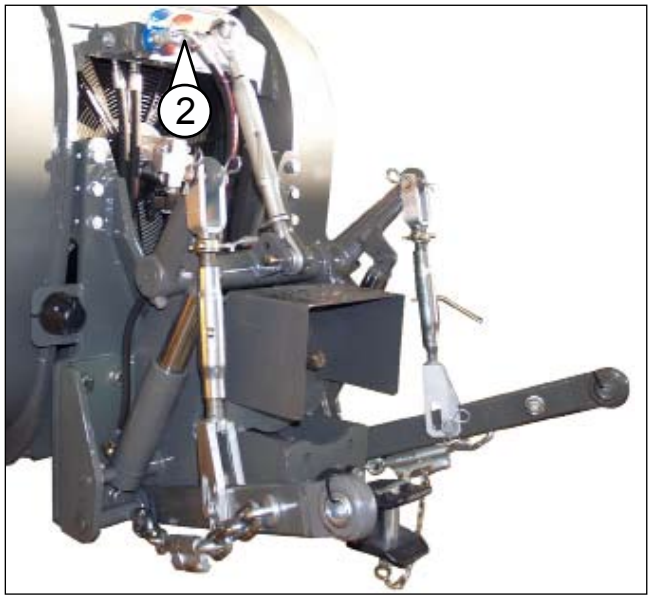
- ATTENTION:

When the switch has been inserted the PTO starts immediately. Before starting the PTO, insert the Cardan shaft. **Stay at a safe distance from the same.** Before starting the PTO, check that no-one is in the vicinity ofthe same, the Cardan shaft and the mechanical user of the socket.

- ATTENTION:

If the PTO should undergo stress greater than nominal, supplied by the manufacturer, automatic disconnection takes place, with blocking of the revolving motion.

(fig.130/C)



(fig.132/C)

(fig.131/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

THREE-POINT LIFTING DEVICE (OPTIONAL)

(fig.134/C)

Act on the relevant lever to activate the three-point lifting device (fig.133/C pos.”1”).

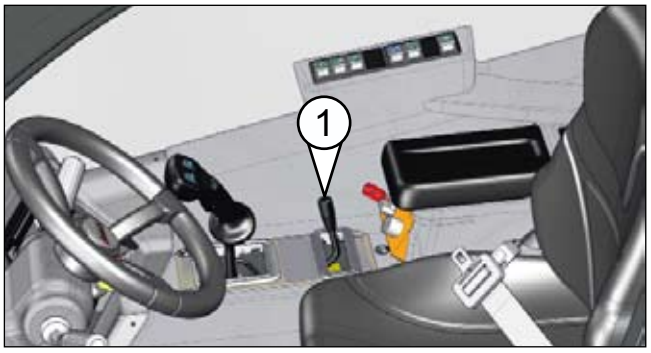
Acting on the lever, the lateral arms start to move (fig.134/C pos.”1-2”).

Before use, regulate the lateral arms (fig.134/C pos.”1-2”), the chains (fig.134/C pos.”3”) and the central arm (fig.134/C pos.”4”) according to the type of use and tool to be connected.

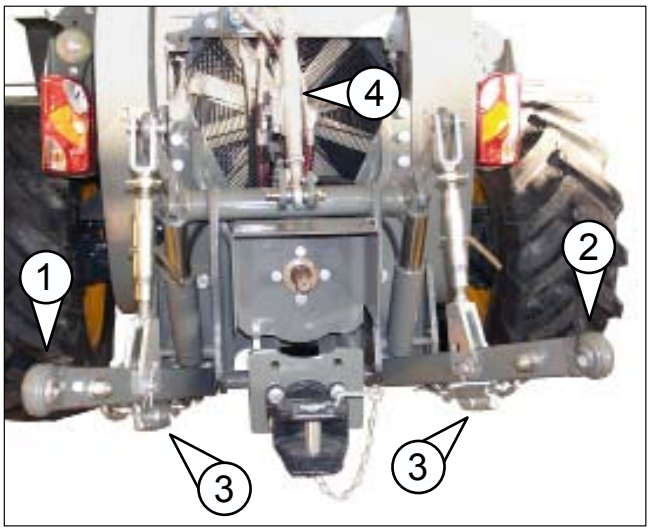
The central arm (fig.134/C pos.”4”) must always be connected correctly to the user.

- ATTENTION:

Before use, check that no-one is in the vicinity of the vehicle, the three-point lifting device and the user.



(fig.133/C)



(fig.134/C)

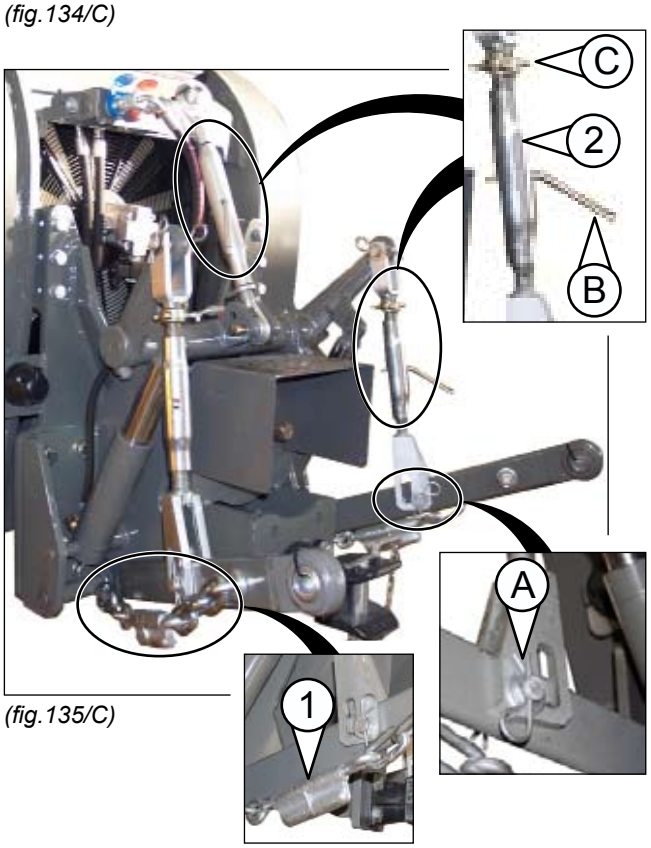
Regulation of the 3-point lifting device

For regulation of the lifting unit, proceed as follows:

- To regulate opening of the lateral arms, act on the chains loosening/tightening the junction pin (fig.135/C pos.”1”).
- To regulate the height of the arms tighten/loosen the fixing rod (fig.135/C pos.”2”) forcing the lever (fig.135/C pos.”B”) and blocking the rod in the position using the lock-nut (fig.135/C pos.”C”).

- ATTENTION:

Before use, check that all cotters are present in the pins that make up the 3-point lifting device (fig.135/C pos.”A”). Also insert the cotters on the pins that will connect the tool to use to the 3-point lifting device. **DO NOT** use the lifting device if all cotters and retainer/safety pins **ARE NOT** present.



(fig.135/C)

HYDRAULIC BRAKING SYSTEM FOR TRAILERS (ITALIAN TYPE) (OPTIONAL)

The indicator light (fig.140/C pos.”A”) signals low braking system pressure.
Connect the trailer’s hydraulic braking system to that of the vehicle using the hydraulic socket (fig.141/C pos.”1”). If not being used, the socket must be suitably protected by its hydraulic socket cover (fig.141/C pos.”2”).

- ATTENTION:
Do not move the vehicle until the indicator light has switched off, as the trailer may not brake properly.

- ATTENTION:
Verify that all connections are attached properly and that the trailer brakes regularly before moving the vehicle.
Do not move the vehicle with the trailer attached in the event of malfunctions.

- ATTENTION:
Before inserting the hydraulic part, connect the trailer to the towing hook (fig.142/C pos.”A”).

The trailer brake act under pressure. The vehicle hydraulic circuit supplies constant pressure to the trailer braking system. This pressure is modulated by means of the brake pump. The trailer is freed from the brakes and can move when the brake system of the trailer is connected to the vehicle. The hydraulic braking valve (fig.143/C pos.”A”), located at the rear of the vehicle, is equipped with a lever (fig.143/C pos.”B”) to put pressure on the braking system.

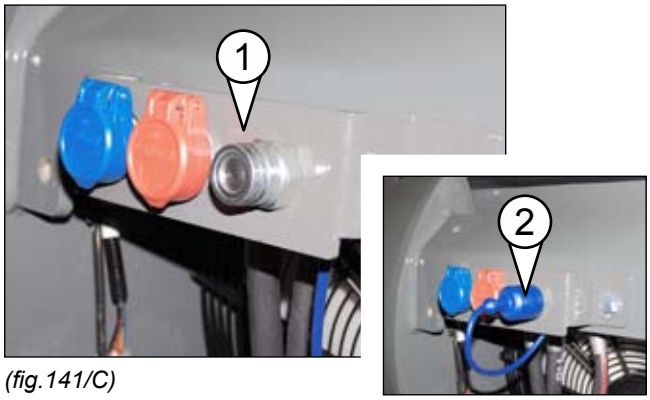
- The system is not under pressure when the lever is in position “0” (fig.143/C).If connected, the trailer is braked.
- The system is under pressure when the lever is in position “1” (fig.143/C). If connected, the trailer is free to move.

The lever must be used to insert the trailer parking/emergency brake. The trailer is braked when the lever is set to position “0” (fig.143/C).

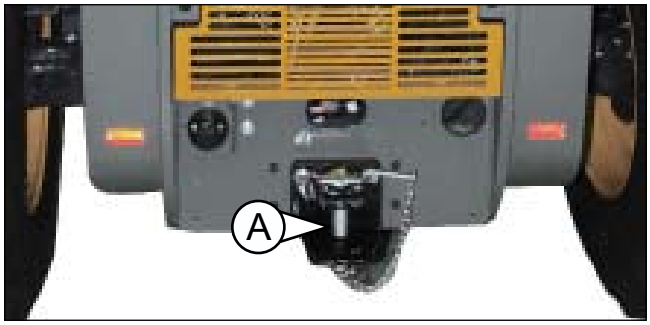
- ATTENTION:
In the event that the trailer is not to be used, set the lever to position “0” (fig.143/C) to prevent the system from remaining under pressure. Keeping the system under pressure causes an unnecessary loss of engine power, leading to higher consumption and unnecessary heating of hydraulic oil.

- ATTENTION:
The trailer parking / emergency brake must be engaged in the same way as the parking brake of the vehicle.

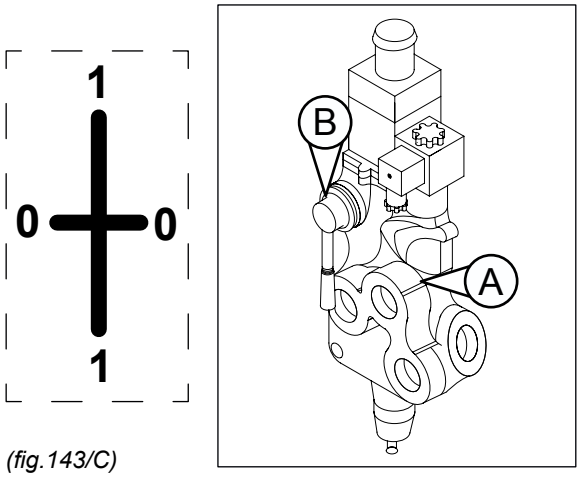
(fig.140/C)



(fig.141/C)



(fig.142/C)



(fig.143/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

HYDRAULIC BRAKING SYSTEM FOR TRAILERS (OPTIONAL)

The trailer brake act under pressure. The vehicle hydraulic circuit supplies constant pressure to the trailer braking system. This pressure is modulated by means of the brake pump.

The indicator light (fig.144/C pos."A") signals low braking system pressure.
Connect the trailer's hydraulic braking system to that of the vehicle using the hydraulic socket (fig.145/C pos."1"). If not being used, the socket must be suitably protected by its hydraulic socket cover (fig.145/C pos."2").

- ATTENTION:

Do not move the vehicle until the indicator light has switched off, as the trailer may not brake properly.

- ATTENTION:

Verify that all connections are attached properly and that the trailer brakes regularly before moving the vehicle. Do not move the vehicle with the trailer attached in the event of malfunctions.

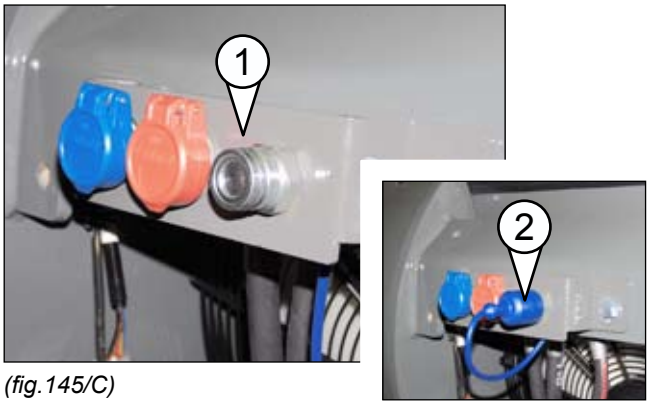
- ATTENTION:

Connect the trailer to the towing hook (fig.146/C pos."A") before inserting the hydraulic part. (fig.145/C)

- ATTENTION:

When the trailer is disconnected, use caution to prevent it from moving in an uncontrolled manner.

(fig.144/C)



(fig.145/C)

(fig.146/C)

HYDRAULIC BRAKING PNEUMATICS FOR TRAILERS (OPTIONAL)

The indicator light (fig.150/C pos.”A”) signals low braking system pressure.

- ATTENTION:

Do not move the vehicle until the indicator light has switched off, as the trailer may not brake properly.

The vehicle may be equipped with one of two desired types of pneumatic attachments (fig.11/C pos.”1”, fig.152C pos.”1-2”). For ensure correct use, connect the attachment’s pneumatic system to that of the vehicle using its fittings.

- ATTENTION:

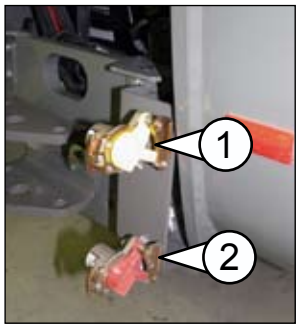
Verify that all connections are attached properly and that the trailer brakes regularly before moving the vehicle. Do not move the vehicle with the trailer attached in the event of malfunctions.

- ATTENTION:

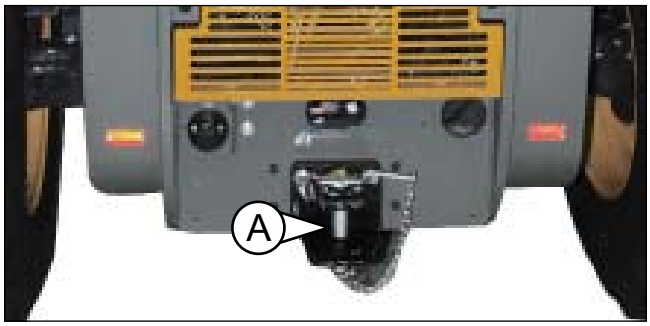
Connect the trailer to the towing hook (fig.153/C pos.”A”) before inserting the hydraulic part.

(fig.150/C)

(fig.151/C)



(fig.152/C)



(fig.153/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

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TOWING THE VEHICLE

The vehicle may only be towed in an emergency and at low speed (max 4 km/hour) and for short distances (max 500 m). Only the anchorage points indicated in figure “160/C” can be used for the front side and figure “161/C” for the rear side. The anchorage points are present on both sides, left and right, and must both be connected for correct towing.

The operations to be carried out are as follows:

- Put the gear in neutral.
- Disengage the negative parking brake
- Connect the towing bracket between the towing vehicle and the broken down vehicle.

⚠ - ATTENTION - ⚠

Never try to start up the vehicle by towing or pushing.

With engine off, the steering servo-control does not work. If the engine cannot be kept running, during towing keep in mind that it will be much more difficult to operate the steering wheel. When the vehicle has been started, position the gearbox in neutral (idle) before starting towing.

With engine off the gear could be engaged. If it is not possible to start the engine to engage the neutral gear “N”, take the gear to neutral manually following the indications given in the “Putting the gear in neutral” chapter (Page C/67).

The parking brake is engaged with the engine switched off. If the engine cannot be kept running during vehicle towing, disengage the parking brake manually, following the instructions given in paragraph “Disengagement of Parking Brake with engine switched off” (Page C/68-C/69).

⚠ - ATTENTION:

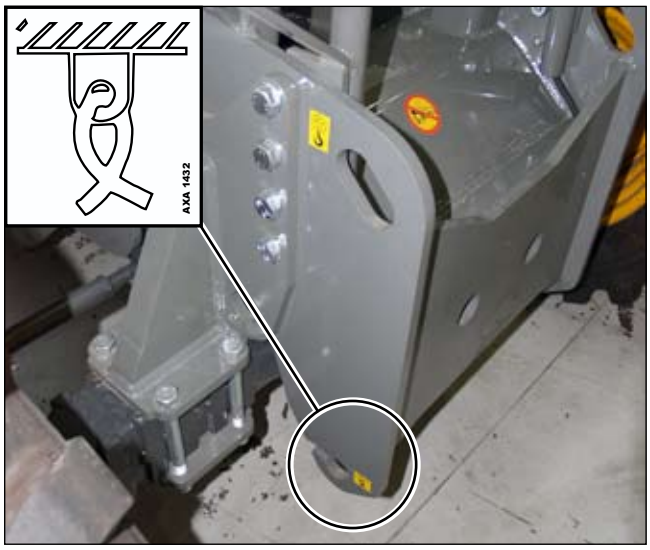
With engine running during towing, remain seated in the driver’s seat to prevent the parking brake from engaging automatically.

The towing bracket must be connected to the vehicle towing setups marked by corresponding symbols (fig.160/C, fig.161/C).

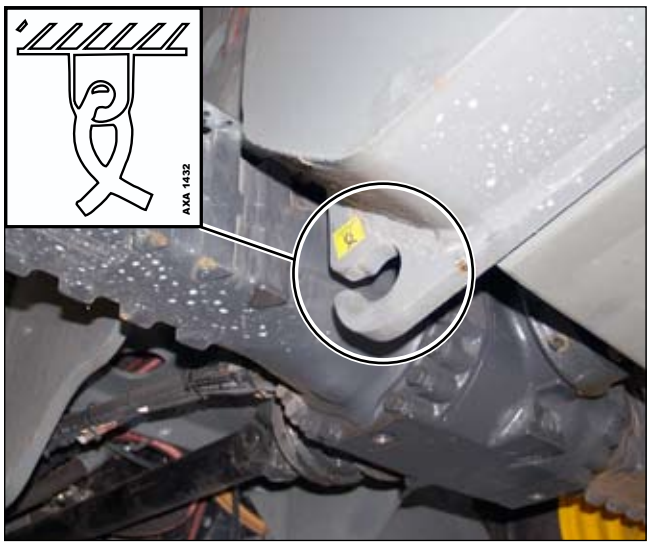
⚠ - ATTENTION:

The vehicle MUST be towed with a towing bracket. The towing bracket must be able to support a towing weight of 10,000 Kg.

Do not tow the vehicle on public roads and for long distances. If possible, keep the yellow flashing lights and emergency lights on.
Do not tow the vehicle on a slope.



(fig.160/C) Front anchorage point



(fig.161/C) Rear anchorage point

⚠ - ATTENTION - ⚠

Do not stand between the towing vehicle and the towed vehicle.

⚠ - ATTENTION - ⚠

have the operations described above performed by expert staff.

⚠ - CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

PUTTING THE GEAR IN NEUTRAL

Operating Description

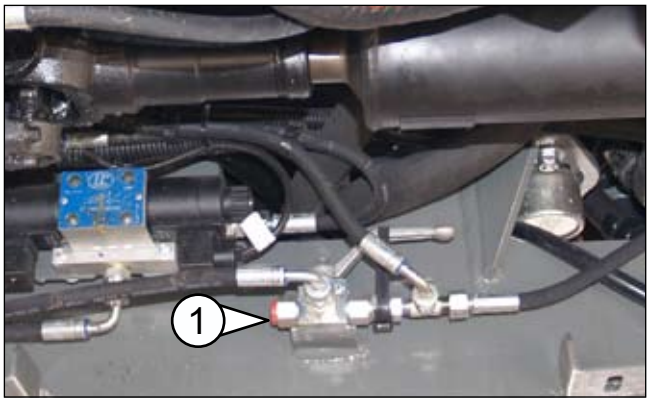
- Switch off the engine.
- Turn the lever (fig. 162/C Pos. “1”) of the hydraulic valve towards the vehicle cab, bringing it to the closed position. The valve is located under the vehicle, in the centre near the reducer.
- Position the gear selector pin (fig. 163/C Pos. “1”) in neutral, using a screwdriver.

- ATTENTION:

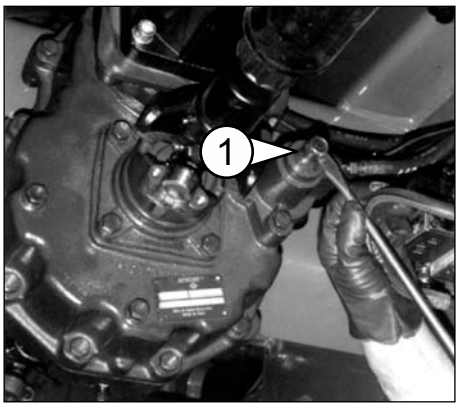
Before towing the vehicle, switch on the dashboard and if possible, ensure that the forward and reverse gear indicator lights are off.

- ATTENTION:

Once the towing operations have been completed, reopen the valve, bringing it back to its original position.
To insert the gear, use the switch provided as described in paragraph “Fast/slow Gear Switch” (pag.C/27).



(fig.162/C)



(fig.163/C)

(fig.164/C) ***fast gear engaged***

(fig.165/C) ***neutral***

(fig.166/C) ***slow gear engaged***

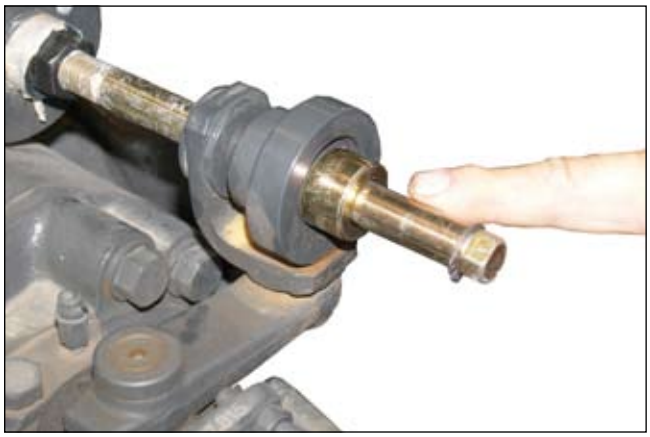
disengaging the negative parking brake with the engine stopped (Agri Max, Agri Power, Agri Star)

1. Position a screwdriver as in the figure (fig.170/C).
2. Use a rubber mallet to strike the handle of the screwdriver.
3. Now the parking brake is disengaged and will re-engage automatically on engine start-up.
   In these conditions it is possible to tow the vehicle.
4. To put the brake back into operational conditions, just start the engine.

⚠ - ATTENTION - ⚠

once towing operations are complete bring everything back to its original position.
Do not use the vehicle with the negative parking brake disengaged.
have the operations described above performed by expert staff

(fig.170/C)



(fig.171/C) Parking brake ENGAGED

(fig.172/C) Parking brake DISENGAGED

disengagementofnegativebrakewithengineswitchedoff (Agri Max 70.10)

Operating Description

- Loosen the lock nuts located on both sides of the central body of the front axle (fig.173/C Pos.”2”).
- Tighten the screws (fig.173/C Pos.”1”) until resistance is encountered note the number of turns made in order to bring the crews back to their original position once towing operations have been completed.
- Tighten the screws another 1.5 turns.

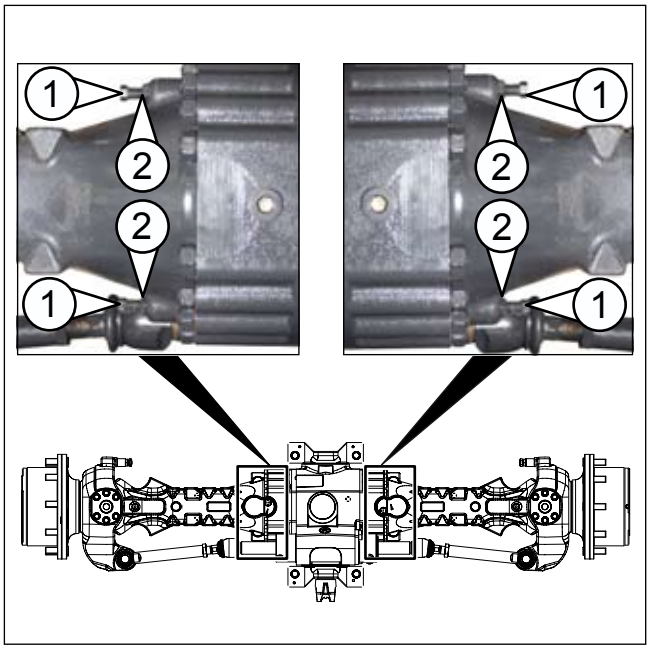
The brake will be unlocked. Once towing operations are complete bring everything back to its original position.

- ATTENTION:

It is very IMPORTANT that the screws be re-tightened using the same number of turns used to loosen them.

- ATTENTION -

once towing operations are complete bring everything back to its original position.
Do not use the vehicle with the negative parking brake disengaged.
have the operations described above performed by expert staff



(fig.173/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

CATALYTIC PURIFIER (OPTIONAL)

(fig.180/C)

duration

As the catalyst is not actively involved in the chemical reaction it provokes, its life is theoretically unlimited. However, due to certain conditions such as: engines not perfectly tuned, vehicle vibrations and the abrasive effect of fumes on the support, the life of the catalyst may be shortened. In reality, the **duration** of the catalytic purifier is about **10000 work hours**.

Maintenance

The catalyst is activated by the high temperature of the fumes which also prevents any particles from depositing on the honeycomb; less maintenance is, consequently, needed. It is advisable to clean the purifier every **500 working hours**. Remove the catalyst and place it in a container with hot soapy water, making sure it is completely emerged. Leave it to soak for 5 hours, then wait for it dry completely (a gentle jet of compressed air could possibly be used to speed up drying) and remount.

(fig.180/C)

WATER DRIVEN PURIFIER (OPTIONAL)

(fig.181/C)

The water driven purifier is manufactured entirely in stainless steel with titanium and is resistant to high temperatures and to corrosive sulphurous compounds which are present in the exhaust fumes.

It consists of a horizontal cylindrical body (sized according to engine power) which makes up the water tank, two mounting brackets and a cylindrical tower located on the upper part of the water tank that contains the separator.

The gases are directed through an entry tube to the interior part of the purifier and then passed to the water. The carbonaceous particles become heavier upon contact with the water and fall to the bottom of the water tank. The gases are then directed towards the separator which recovers the carbonaceous particles that have not fused with the water. The white smoke emitted from the exhaust is simply water vapour.

Maintenance

Maintenance of the water driven purifier is **EXTREMELY IMPORTANT** and the water must be **changed** every **8 working hours**. The tank must be emptied using the spherical drain valve and clean water must be added through the loading and level cock.

The black sludge which comes out when changing the water is proof of the purifier's effectiveness. Every **300 working hours** the purifier must be **cleaned**: drain the water and clean the inside for a few minutes using a pressurised jet. ***DIECI*** also provides the additive TAM which, if added to the water at every change, helps to keep the purifier clean. TAM also improves the performance of the purifier: it neutralises sulphuric acids.

(fig.181/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

GETTING TO KNOW AND USING THE VEHICLE

INTEGRATED DEVICES

“CENTRAL DASHBOARD”

EVERY MODIFICATION MADE TO THE VEHICLE LEADS TO A NEW VERIFICATION OF CONFORMITY WITH THE 98/37 MACHINERY DIRECTIVE "CE" THIS PROCEDURE IS ALSO VALID IN THE CASE OF REPAIRS WITH NON-ORIGINAL SPARE PARTS.

IT IS PROHIBITED TO OPERATE IF THIS MANUAL HAS NOT BEEN READ AND UNDERSTOOD.

THE OPERATOR IS REQUIRED TO LEARN THE LOCATION AND FUNCTION OF ALL INSTRUMENTS AND CONTROLS, INDEPENDENT OF HIS OR HER EXPERIENCE IN THE FIELD, BEFORE OPERATING THE VEHICLE.

THE IMAGES, DESCRIPTIONS, MEASUREMENTS, GIVEN IN THIS CHAPTER REFER TO STANDARD VEHICLES.

YOUR VEHICLE CAN BE SET-UP WITH OPTIONAL CONTROLS AND ACCESSORIES ON REQUEST.

ALL FUNCTIONS, PROCEDURES, INHERENT THE USE AND SET-UP OF VEHICLE EQUIPMENT, NOT DESCRIBED IN THIS MANUAL, ARE PROHIBITED.

USE OF THE VEHICLE DIFFERENT TO THAT DESCRIBED IN THIS MANUAL IS PROHIBITED.

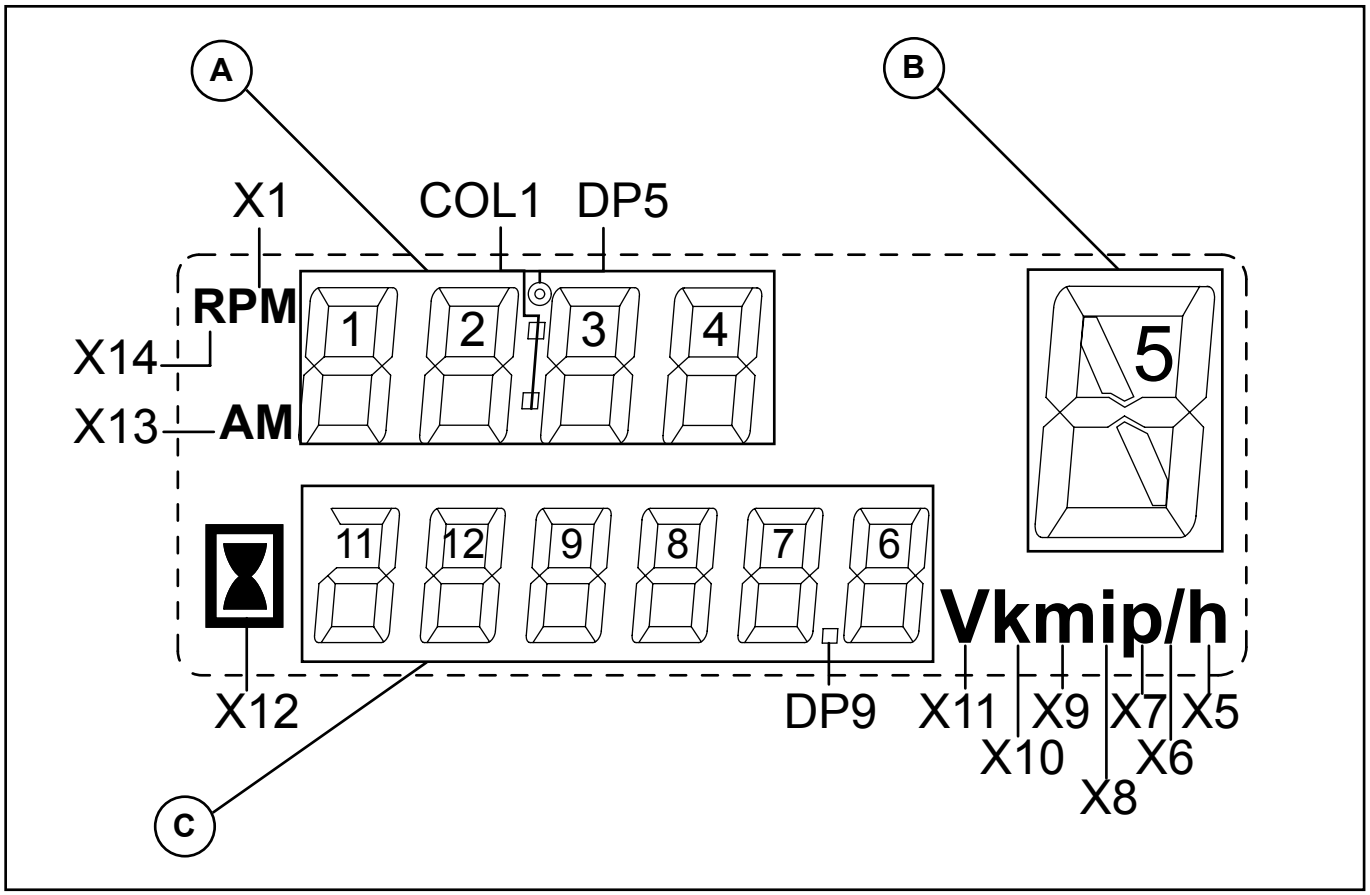
IT IS MANDATORY TO HAVE READ AND LEARNED CHAPTER "B" (SAFETY STANDARDS) BEFORE READING CHAPTER "C" AND USING THE VEHICLE.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

LCD

The following functions will be shown on the display:

- Timer (6 characters of which one a decimal point plus hourglass) (fig.100/C pos.”C”).
- Clock (4 characters) (fig.100/C pos.”A”).
- Speedometer (3 characters of which one a decimal point plus km/h, m/h and mph) (fig.100/C pos.”C”). (OPTIONAL)
- Hodograph (6 characters of which one a decimal point plus km and miles) (fig.100/C pos.”C”). (OPTIONAL)
- Neutral gear engaged (fig.100/C pos.”B”). (NOT AVAILABLE)
- Engine errors (Large E flashing + 3 characters at top) (fig.100/C pos.”A”, fig.100/C pos.”B”, fig.100/C pos.”C”). (NOT AVAILABLE)
- Service (Large S flashing + n° hours missing to service) (fig.100/C pos.”A”, fig.100/C pos.”B”)



(fig.100/C)

speedometer (optional)

The speedometer allows to display the speed of the vehicle in real time.
In the vehicle with Vario System drive the speedometer shows the advancement speed on exceeding 3km/h. With lower speed the instrument displays the hours of use of the vehicle (Hour meter function).
The maximum speed of the vehicle varies on inflation pressure variation, the measurement and wear of the tyres.

Hodograph (optional)

The hodograph allows to display the kilometres travelled by the vehicle. The instrument is combined with the speedometer.

(fig.101/C)

BUTTONS

There are two integrated buttons on the panel:

- Button “1” (fig.101/C) temporarily prevents the acoustic signal (buzzer) of the anti-tipping system, anti-tipping system test.
- Button “2” (fig.101/C) changes the display.

Changing display visualisation

By pressing key ”2” (fig.101/C) display visualisation is changed cyclically following the logic below:

1. Timer and clock.
2. Speed and clock.
3. Hodograph and clock.
4. Timer and clock.

The normal visualisation of the display will be Clock and Hour counter. In the case of installation of the speedometer, the display will automatically pass to the Clock and Speed display.

Clock regulation

To regulate the clock:

- Switch off the dashboard.
- Press key “2” (fig.101/C) and hold it down.
- Switch the dashboard on
- Hold key “2” down (fig.101/C) for 1.5 seconds for the duration of the “check”.
- Now you are in “Regulation” mode

With minutes characters flashing, press:

- key “1” (fig.101/C) to increase the character.
- key “2” (fig.101/C) to confirm the selection.

With hours characters flashing, press:

- key “1” (fig.101/C) to increase the character.
- key “2” (fig.101/C) to confirm the selection.

The calibration check has ended and the instrument starts to work normally (excluding the initial check).

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

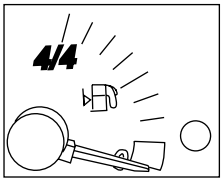
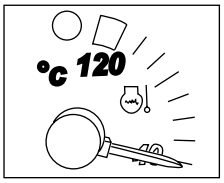
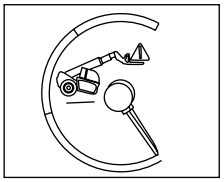
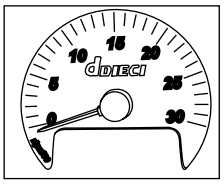
DASHBOARD INSTRUMENT INITIAL CHECK

On switch-on, the panel switches some indicator lights, the buzzer and all segments of the display on for the duration of 1.5. seconds. The tables are shown below (fig.102/C) that contain all dashboard indicator lights and their behaviour at the time of the check. The instruments (fig.103/C) carry out an initial check by moving the pointers and temporary switch-on of the corresponding LED. The LCD carries out complete temporary switch-on of all symbols that can be represented.

LEDS	INITIAL CHECK
	YES
	YES
	YES
	YES
	YES
	NO
	NO
	YES
	YES
	YES
	YES
	YES

LEDS	INITIAL CHECK
	YES
	YES
	YES
	YES
	YES
	YES
	YES
	YES
	YES
	YES
	YES
	YES

(fig.102/C)

INSTRUMENTS	INITIAL CHECK
	YES
	YES
	YES
	YES
	YES

(fig.103/C)

ANTI-TIPPING SYSTEM TEST

(fig.104/C)

Press and hold button “1”(fig.104/C) for 2 seconds, during normal functioning of the instrument, to carry out the anti-tipping system test.

The test consists in:
1. Indicator in start position 1st Green sector.
2. Indicator in end position 2nd Red sector.
3. Indicator in start position 1st Green sector.
4. Indicator in current work position.

The angular speed of the index during the test is 240 angular degrees in 2 sec. (120 degrees/sec).

ANTI-TIPPING SYSTEM MUTE

Press button “1” (fig.104/C) to suspend the acoustic signal due to an alarm of the anti-tipping system. In the alarm zone (start of 1st Red sector start of 2nd Red sector) the acoustic signal must always be activated even if key “1” has been previously pressed (fig.104/C).

Example:
1. The indicator enters the 1st Red zone.
2. The buzzer starts to ring intermittently.
3. Pressing the last key suspends the acoustic signal.
4. The indicator continues to rise and enters the 2nd Red zone.
5. The buzzer starts to ring continuously. Pressing the last key suspends the acoustic signal.

GENERAL ALARM INDICATOR LIGHT

The emergency indicator light/general alarm occur:

- in the event of engine error
- if one of the indicator lights indicated in the table below should switch on
- in the event of engine overrevving

Engine error

The engine has an electronic control unit that communicates directly with the central dashboard. The anomalies are signalled by the general alarm indicator light accompanied by the acoustic signal with duration of 1.5 seconds and the display of the error code on the LCD.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

Switch-on of dashboard indicator lights

Some signal indicator lights, which are particularly important for the duration and use of the same in complete safety have been coupled to the general alarm indicator light (fig.105/C) with acoustic signal lasting 1.5 seconds. The acoustic signal functions only with the engine running. The signalling of alarms by the indicator light “1” (fig.105/C) has precedence over other signals that this communicates. Other anomaly signal lights have not been coupled to the general alarm indicator light and have their own type of signal (fig.106/C).

	LED 1	LED 2	Buzzer
Coupling 1			**YES (1.5 seconds)**
Coupling 2			**YES (1.5 seconds)**
Coupling 3			**YES (1.5 seconds)**
Coupling 4			**YES (1.5 seconds)**
Coupling 5			**YES (1.5 seconds)**

(fig.105/C)

Function	LED	Type of signal
Insufficient pressure in the accumulator		**fixed accumulator**
Failure of parking brake		**fixed accumulator**
Brake fluid low level		**Intermittent (0.5”on, 0.5”off)**
Drive oil temperature		*** Note**

(fig.105/C)

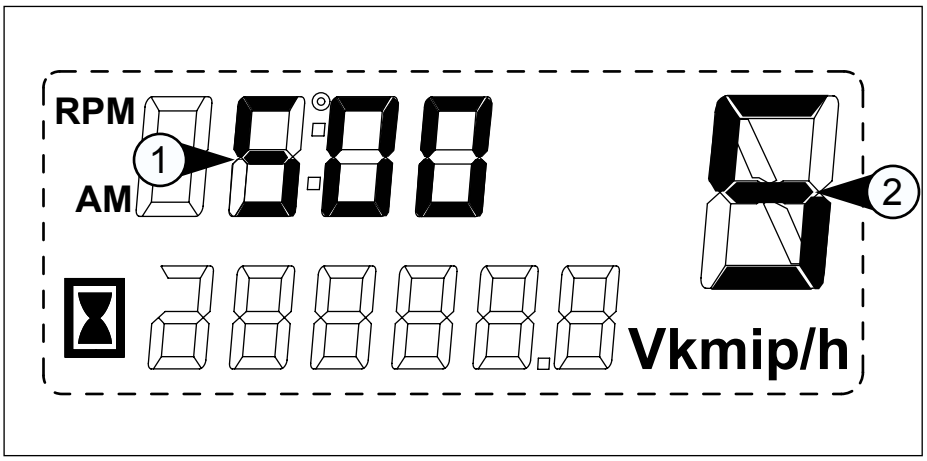
*** Note: fixed** (Vehicle with Power Shift Gearbox)

*** Note: Fixed on** < -20°C < **Intermittent on** < 20°C < **Off** > 105°C > **Intermittent** > 115°C > **Fixed on**
(Vehicle with Vario System Drive)

*** Note:** With Vario System drive
- The vehicle functions regularly between 20°C and 105°C.
- The power descends between -20°C and 20°C
- The power descends between -105°C and 115°C
- The vehicle blocks below -20°C
- The vehicle blocks over 115°C

SERVICE

On reaching the SERVICE on the LCD, the letter “S” will be shown (fig.109/C pos.”2”) with the hours corresponding (fig.109/C pos.”1”) to the SERVICE.
Display will only occur on switch-on of the dashboard for a time of 10 seconds with letter “S” flashing.



(fig.109/C)

The hour count is managed from the panel.

Every 300 hours the letter “S” (flashing) must always be shown at every switch-on along with the service interval reached (e.g. 300,600,900 ….) as shown in the table.

The service message will deactivate automatically after 20 hours have passed from display of the voucher.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

MAINTENANCE AND REGISTRATION

D

EVERY MODIFICATION MADE TO THE VEHICLE LEADS TO A NEW VERIFICATION OF CONFORMITY WITH THE 2006/42 MACHINERY DIRECTIVE "CE"THIS APPLIES EVEN IN CASES OF REPAIR WORK COMPLETED WITH NON ORIGINAL PARTS.

ALL PROCEDURES OR MAINTENANCE OPERATIONS NOT DESCRIBED IN THIS MANUAL MUST BE PERFORMED BY AUTHORISED WORKSHOPS AND BY QUALIFIED STAFF.

ONLY THE FOLLOWING CHECKS CAN BE PERFORMED BY THE OPERATOR: CHECKING LIQUID LEVELS, CLEANING THE AIR FILTER, CHECKING TYRE PRESSURE. THESE OPERATIONS MUST BE PERFORMED IN COMPLIANCE WITH SAFETY STANDARDS AS DESCRIBED IN THIS MANUAL.

THE KNURLED PLATES (BULB PLATES) AND THE CAB FLOOR ARE THE ONLY PARTS OF THE VEHICLE THAT CAN BE STEPPED ON. USE A LADDER (SUITABLE FOR THE PURPOSE INTENDED) FOR MAINTENANCE PARTS THAT CANNOT BE REACHED FROM THE GROUND.

IT IS MANDATORY TO HAVE READ AND LEARNED CHAPTERS "B" AND "C" (SAFETY STANDARDS/TO KNOW AND USE THE VEHICLE) BEFORE READING CHAPTER "D".

IT IS PROHIBITED TO START TO SERVICE THE VEHICLE IF THIS CHAPTER HAS NOT BEEN READ AND UNDERSTOOD.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

MAINTENANCE PRESCRIPTIONS

INTRODUCTION

This vehicle has been designed and built to provide maximum performance, savings and facilitate its operation in various working conditions. Before delivery, the vehicle was tested both by the Manufacturer and by the Dealer to ensure its maximum condition. To preserve these conditions and guarantee problem-free operation, it is important to carry out the routine maintenance operations described in this manual at an authorised dieci dealer in accordance with the maintenance schedule provided.

Maintenance

This section of the Manual provides all the maintenance prescriptions necessary for maintaining the dieci vehicle in perfect working condition.

This chapter also provides information on carrying out the various adjustments necessary to keep the vehicle tuned. The vehicle must receive regular routine maintenance in order to give the best results. It is recommended that all services be carried out as prescribed in the service schedule suggested by ***DIECI***. Remember that it is the owner's and/or users responsibility to keep the vehicle in safe working condition and suitable to be driven on public and private roads.

Maintenance or adjustment operations not described in this chapter or in the rest of the manual must be carried out by qualified personnel respecting the conditions of safety in order to guarantee their safety and the safety of others. Only ***DIECI*** Dealer maintenance staff have been trained to carry out said interventions and only they have the special equipment and tools necessary to guarantee maximum safety, precision and efficiency.

Spaces for registering periodic inspections can be found at the end of this Manual. These allow operators to plan interventions and register them in chronological order. After each inspection, the Dealer must insert the date of intervention, a signature and the Dealer stamp in the space.

Proper vehicle maintenance not only improves the vehicle reliability but it also preserves vehicle value over time.

Owner/ Operator Assistance

Make note of this important data before contacting your service centre, in order to obtain maximised service assistance from your Dealer.

1 - Specify your name, address and telephone number.

2 - Provide the model and chassis serial number of the vehicle.

3 - Indicate the purchase date and working hours.

4 - Explain the type of malfunction.

Only ***DIECI*** Dealers have access to dieci client service resources. Moreover, Dealers are able to offer a variety of programmes concerning guarantee, fixed rate maintenance and safety checks including weight tests, in compliance with both legal and insurance requirements.

Protect the environment

It is illegal to pollute sewers, water sources or soil. Use only authorised dumping grounds centres, including the areas designated by the local authorities or workshops equipped with the necessary tools for the disposal of used oils. If in doubt, contact your local authority for relevant instructions.

- ATTENTION -

IT IS MANDATORY TO HAVE READ AND LEARNED CHAPTERS "*B*"-"*C*" (SAFETY STANDARDS/TO KNOW AND USE THE VEHICLE) BEFORE READING CHAPTER "D" AND SERVICING THE VEHICLE.

RUNNING IN PERIOD

The operations indicated below must be carried out only once when the indicated time period has elapsed after the new vehicle has been put into service. After this adhere to the intervals specified in the general maintenance schedule.

After 10 hours of work:

- Check for and eliminate any leaks.
- Check and tighten all hydraulic connections and nuts and bolts.

After 50 hours of work:

- Check for and eliminate any leaks.
- Check and tighten all hydraulic connections and nuts and bolts.

After 250 hours of work:

- Change engine oil.
- Replace engine oil cartridge.
- Change mazut cartridge.
- Replace oil filter.

- ATTENTION -

IF THE VEHICLE IS DESTINED FOR USE IN CRITICAL CONDITIONS (DUST, MUD, SAND), MAINTENANCE INTERVALS RE REDUCED BY 50%.

- ATTENTION -

CHECK THE HOUR COUNTER EVERY DAY TO CHECK IF MAINTENANCE OPERATIONS MUST BE PERFORMED.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

DECLARATION OF VIBRATORY EMISSIONS

- The declared vibration emission value complies with standard EN 12096

Agri Max

1) vibration values on the seat

Vibratory emission value measured as = 1.8 m/s2
Uncertainty K = 0.5 m/s2

Values determined subject to standard EN 13059

2) vibration values on the steering wheel

Vibratory emission value measured as = 4.5 m/s2
Uncertainty K = 2.2 m/s2

Values determined subject to standard EN 13059

Agri Power

1) vibration values on the seat

Vibratory emission value measured as = 1.8 m/s2
Uncertainty K = 0.5 m/s2

Values determined subject to standard EN 13059

2) vibration values on the steering wheel

Vibratory emission value measured as = 4.5 m/s2
Uncertainty K = 2.2 m/s2

Values determined subject to standard EN 13059

Agri Star

1) vibration values on the seat

Vibratory emission value measured as = 1.8 m/s2
Uncertainty K = 0.5 m/s2

Values determined subject to standard EN 13059

2) vibration values on the steering wheel

Vibratory emission value measured as = 4.5 m/s2
Uncertainty K = 2.2 m/s2

Values determined subject to standard EN 13059

DECLARATION OF FIRST INSPECTION BY MANUFACTURER

DIECI S.r.l. declares that every vehicle produced in its factories undergoes static and dynamic inspections before being placed on the market in order to verify proper operation and compliance with all relative European directives. After inspections are performed, a CE certificate is issued that corresponds to the vehicle inspected and its supplied attachments.

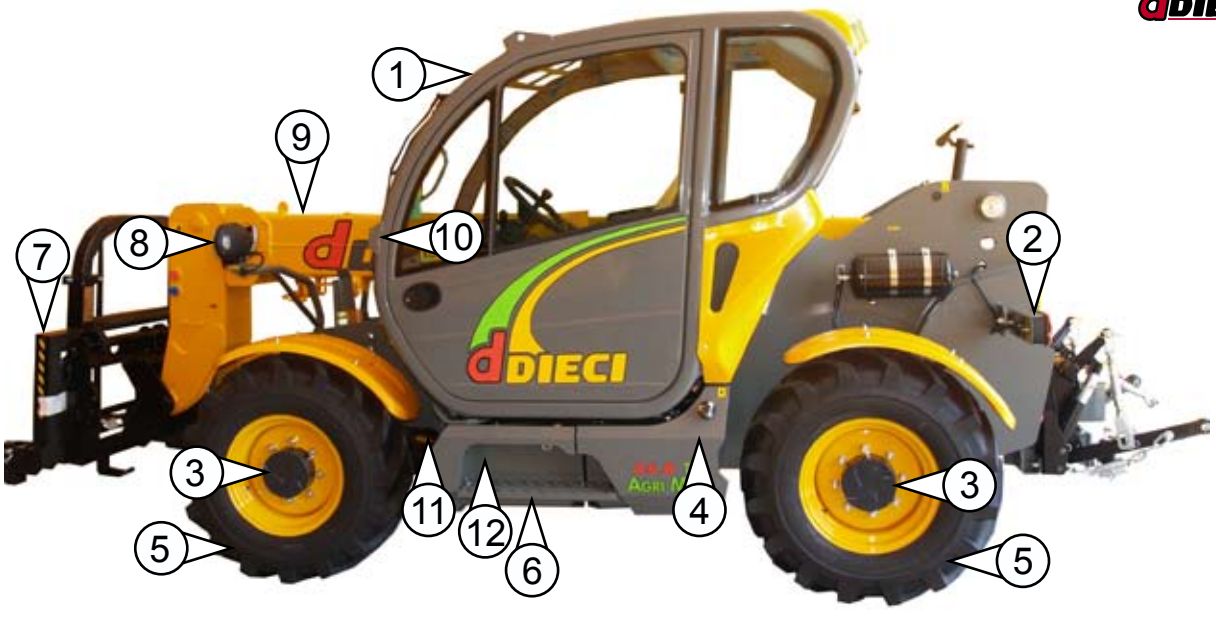
Every CE-marked dieci product is supplied with its own certificate, which must be kept by the vehicle's legitimate owner in accordance with the law.

IDENTIFYING THE VEHICLE PARTS

Right side of vehicle

1. Cab
2. Telescopic boom
3. Right rear view mirror
4. Right front light
5. Attachment holding plate
6. Epicycloidal reduction gear
7. Wheel
8. Engine bonnet
9. Right rear light
10. Battery isolator switch

Left side of vehicle

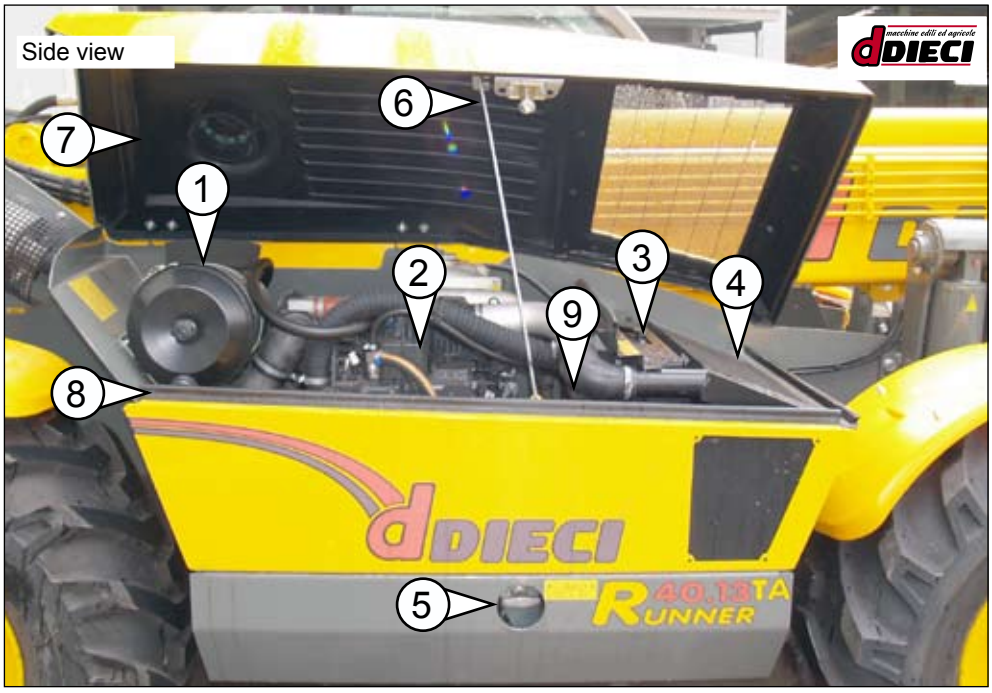


1. Cab
2. Left rear light
3. Epicycloidal reduction gear
4. Fuel tank
5. Wheel
6. Cab steps
7. Attachment holding plate
8. Left front light
9. Telescopic boom
10. Left rear view mirror.
11. Hydrostatic oil filter
12. Hydraulic oil tank

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

IDENTIFYING THE VEHICLE PARTS

1. Battery
2. Air conditioned condenser

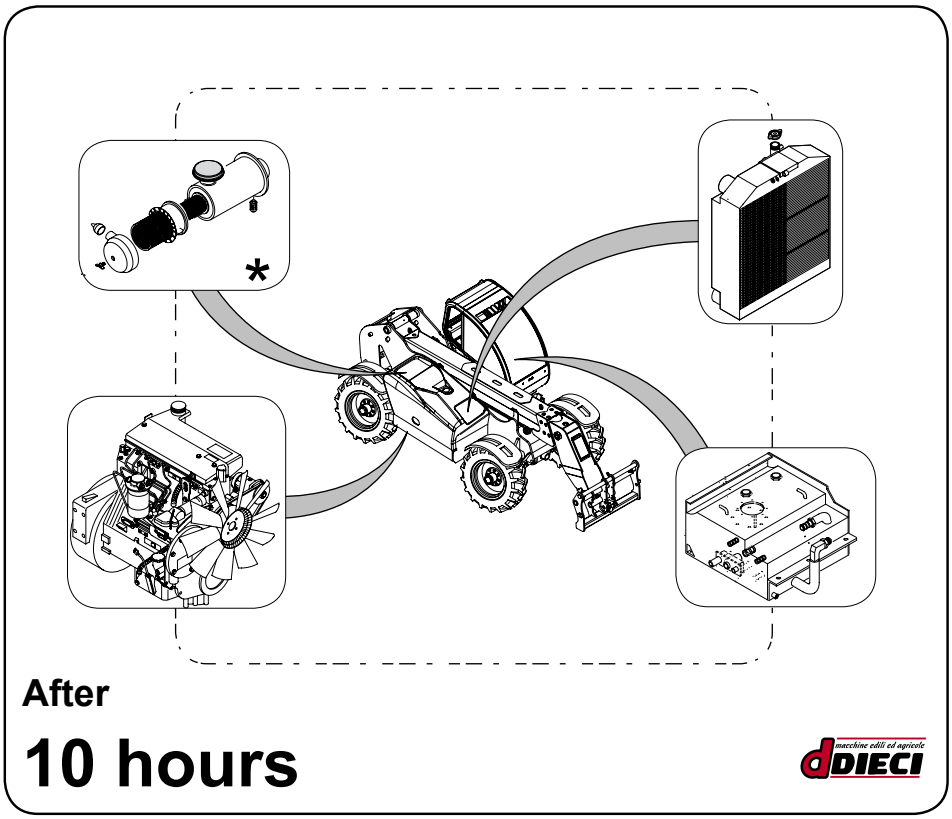


1. Engine air filter
2. Diesel Engine
3. Water/oil radiator
4. Intercooler Radiator
5. Battery isolator switch
6. Engine bonnet support rod
7. Engine bonnet
8. Engine control unit/Engine fuse
9. Cooling fan

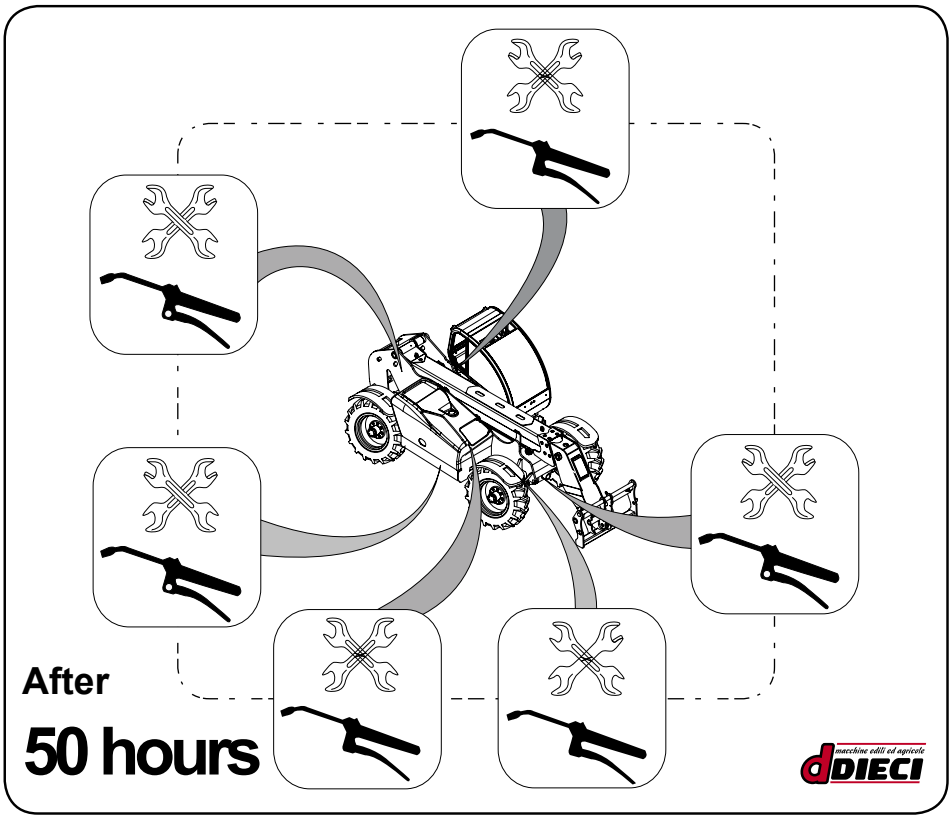
MAINTENANCE and REGISTRATION SCHEDULE

Maintenance operations to be carried out are listed on the left; the graph details the time period in hours and the approximate position of the part to be serviced. The asterisk (*) indicates maintenance in the event of the vehicle's use in special conditions.

- Check engine oil level.
- Air filter cleaning.
- Check radiator water level.
- Check that the radiator is not clogged.
- Check hydraulic oil level



- Check for leaks on hydraulic circuit tubes
- Boom joint pin lubrication.
- Lubrication of feet pins and swivelling jack head.
- Lubrication of feet pins and lifting jack head.
- Lubrication of feet pins and levelling jack head.
- Lubrication of front and rear articulated pins (PIVOT).
- Lubrication of rear axle oscillation bushing (if present).
- Lubrication of front axle oscillation bushing (if present).
- Lubrication of cross and Cardan transmission shafts.
- Lubrication of boom sliders.
- Lubrication of internal boom tubes
- Lubrication of boom rollers and chains.

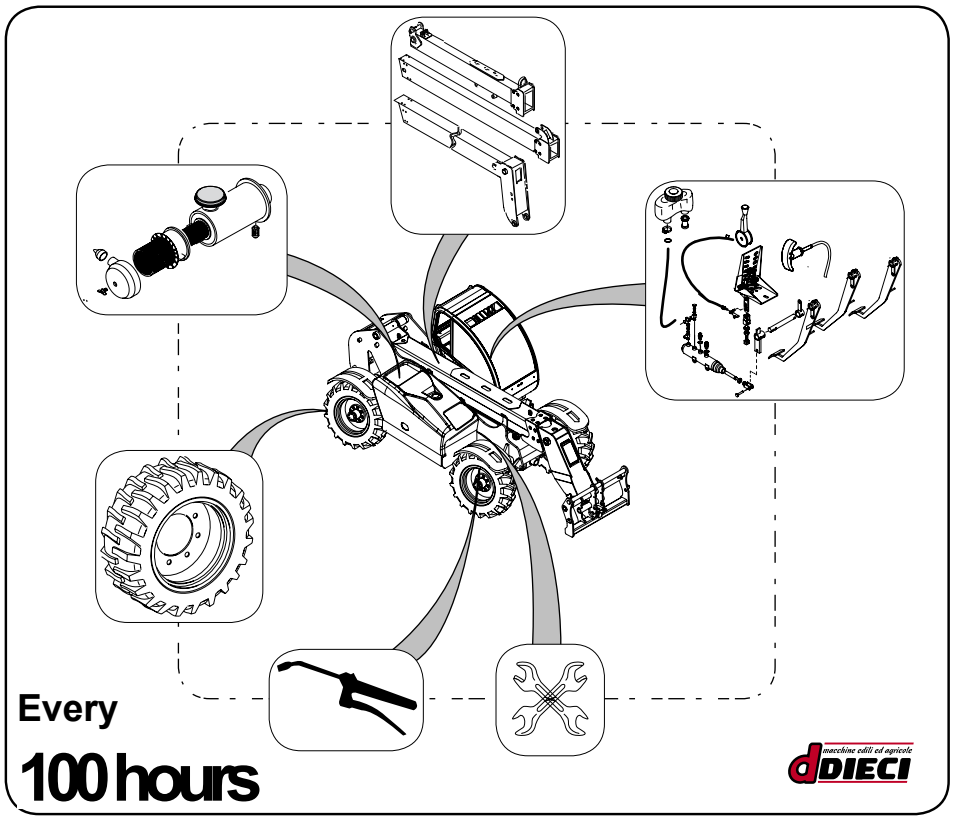


- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

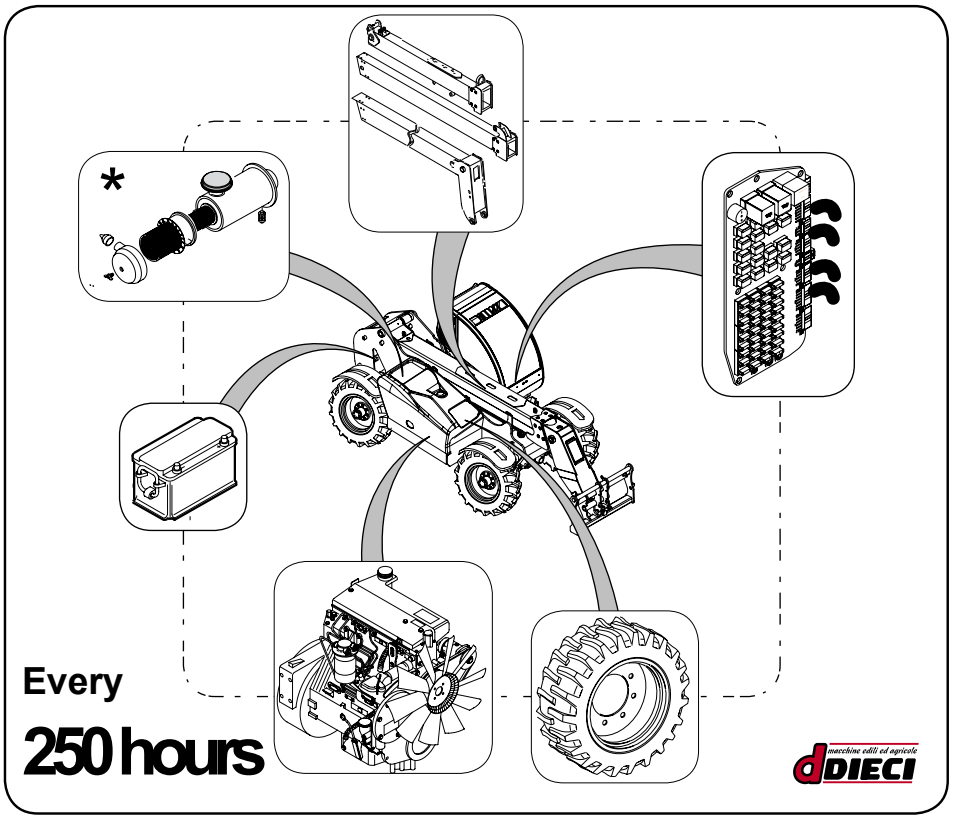
MAINTENANCE and REGISTRATION SCHEDULE

Maintenance operations to be carried out are listed on the left; the graph details the time period in hours and the approximate position of the part to be serviced. The asterisk (*) indicates maintenance in the event of the vehicle's use in special conditions.

- Air filter cleaning.
- Grease differential axle.
- Check tyre pressure.
- Check that all nuts and bolts are tight.
- Check brake oil level.
- Check boom chain extension and conditions.
- Check stickers.



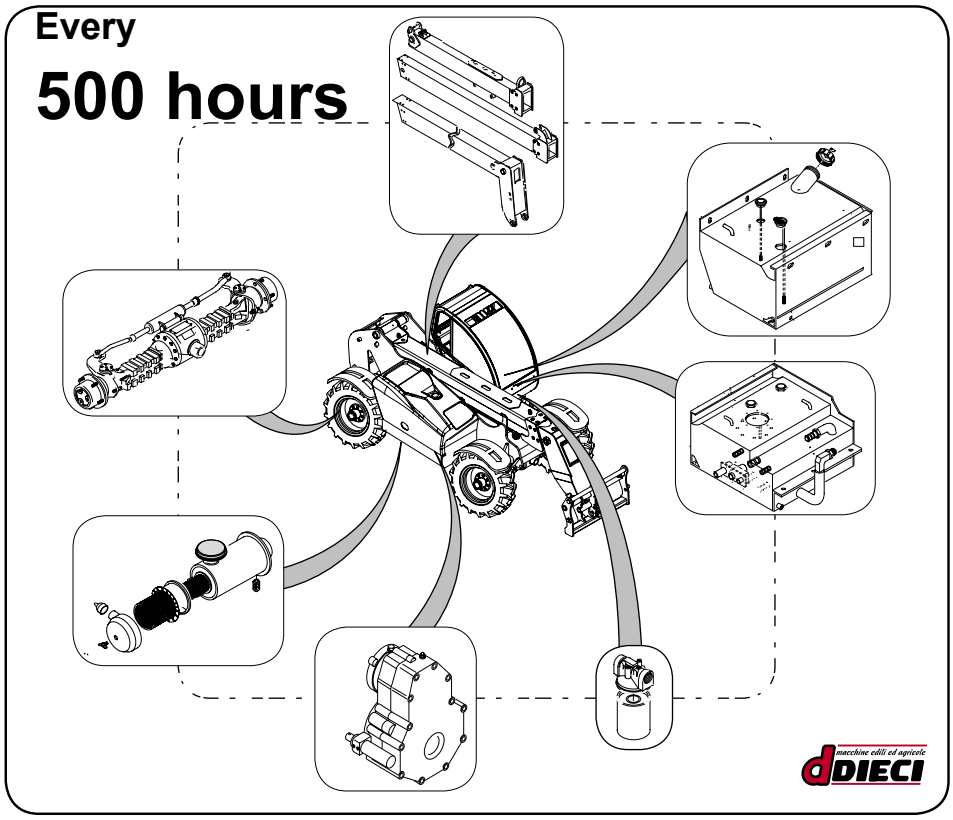
- Replace engine oil.
- Replace engine oil filter. Replace air filter.
- Check battery electrolyte level.
- Check electric system.
- Check alternator belt
- Tighten wheel nuts.
- Replace fuel filter.
- Replace cab filter.
- Tighten boom sliders.
- Check chain tension.



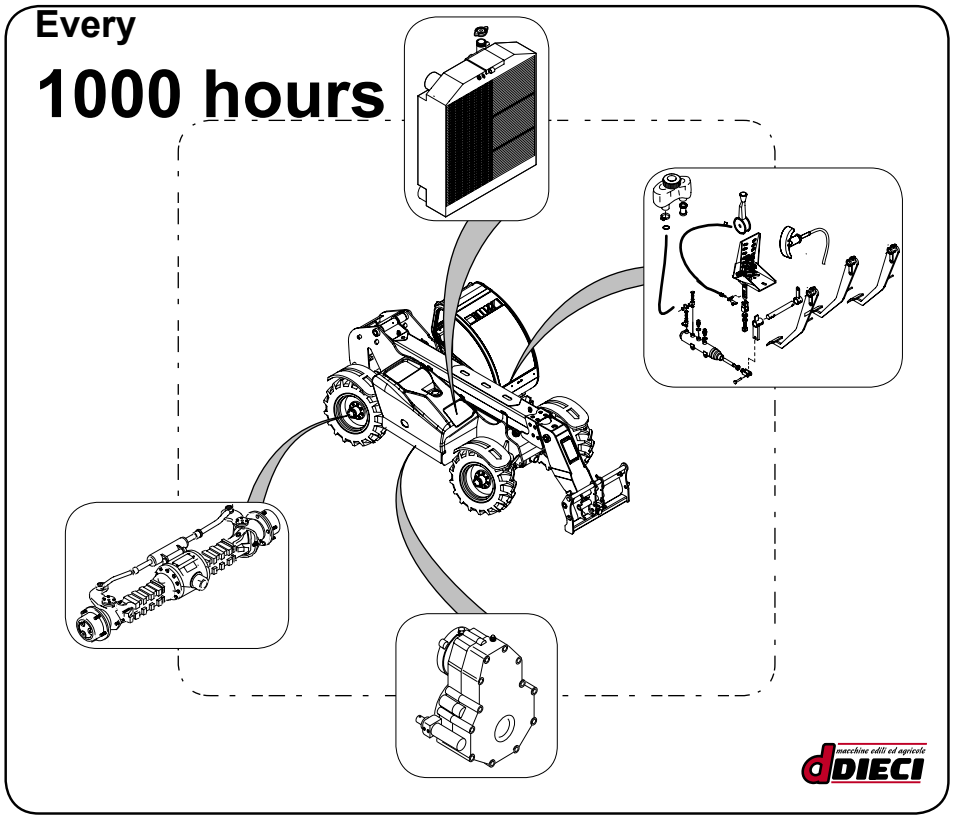
MAINTENANCE and REGISTRATION SCHEDULE

Maintenance operations to be carried out are listed on the left; the graph details the time period in hours and the approximate position of the part to be serviced. The asterisk (*) indicates maintenance in the event of the vehicle's use in special conditions.

- Empty fuel tank.
- Cleaning fuel tank filters
- Clean fuel injection pump filter.
- Check epicycloidal reduction gear oil level.
- Check differential sump oil level
- Check gear oil level
- Replace hydraulic system oil.
- Replace external hydraulic oil filters
- Cleaning of hydraulic oil tank filters.
- Parking brake registration.
- Replace engine air filter.



- Check boom chain
- Replace cooling liquid.
- Replace oil in differential sump.
- Replace oil level in epicycloidal reduction gears.
- Replace gear oil
- Replace brake oil.



- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

CAPACITY OF PARTS TO LUBRICATE

AGRI MAX 45.8

UNIT DESCRIPTION	CAPACITY
ENGINE OIL	10.00 lt
FRONT WHEEL REDUCERS OIL	1.00 lt
REAR WHEEL REDUCERS OIL	1.00 lt
FRONT AXLE DIFFERENTIAL OIL	7.40 lt
REAR AXLE DIFFERENTIAL OIL	7.60 lt
GEAR BOX OIL	1.50 lt
HYDRAULIC PLANT OIL	170lt
BRAKING CIRCUIT OIL	1.2 lt
REFRIGERANT LIQUID	7.0 lt
DIESEL FOR GREASE	105 lt
TRACTION	4 Kg

AGRI MAX 70.10

UNIT DESCRIPTION	CAPACITY
ENGINE OIL	10.00 lt
FRONT WHEEL REDUCERS OIL	1.00 lt
REAR WHEEL REDUCERS OIL	1.00 lt
FRONT AXLE DIFFERENTIAL OIL	7.40 lt
REAR AXLE DIFFERENTIAL OIL	7.60 lt
GEAR BOX OIL	1.50 lt
HYDRAULIC PLANT OIL	170lt
BRAKING CIRCUIT OIL	1.2 lt
REFRIGERANT LIQUID	7.0 lt
DIESEL FOR GREASE	105 lt
TRACTION	4 Kg

AGRI POWER 30.7

UNIT DESCRIPTION	CAPACITY
ENGINE OIL	10.00 lt
FRONT WHEEL REDUCERS OIL	1.00 lt
REAR WHEEL REDUCERS OIL	1.00 lt
FRONT AXLE DIFFERENTIAL OIL	7.40 lt
REAR AXLE DIFFERENTIAL OIL	7.60 lt
GEAR BOX OIL	1.50 lt
HYDRAULIC PLANT OIL	170lt
BRAKING CIRCUIT OIL	1.2 lt
REFRIGERANT LIQUID	7.0 lt
DIESEL FOR GREASE	105 lt
TRACTION	4 Kg

AGRI POWER 30.8

UNIT DESCRIPTION	CAPACITY
ENGINE OIL	10.00 lt
FRONT WHEEL REDUCERS OIL	1.00 lt
REAR WHEEL REDUCERS OIL	1.00 lt
FRONT AXLE DIFFERENTIAL OIL	7.40 lt
REAR AXLE DIFFERENTIAL OIL	7.60 lt
GEAR BOX OIL	1.50 lt
HYDRAULIC PLANT OIL	170lt
BRAKING CIRCUIT OIL	1.2 lt
REFRIGERANT LIQUID	7.0 lt
DIESEL FOR GREASE	105 lt
TRACTION	4 Kg

AGRI POWER 30.9

UNIT DESCRIPTION	CAPACITY
ENGINE OIL	10.00 lt
FRONT WHEEL REDUCERS OIL	1.00 lt
REAR WHEEL REDUCERS OIL	1.00 lt
FRONT AXLE DIFFERENTIAL OIL	7.40 lt
REAR AXLE DIFFERENTIAL OIL	7.60 lt
GEAR BOX OIL	1.50 lt
HYDRAULIC PLANT OIL	170lt
BRAKING CIRCUIT OIL	1.2 lt
REFRIGERANT LIQUID	7.0 lt
DIESEL FOR GREASE	105 lt
TRACTION	4 Kg

CAPACITY OF PARTS TO LUBRICATE

AGRI STAR 37.7

UNIT DESCRIPTION	CAPACITY
ENGINE OIL	10.00 lt
FRONT WHEEL REDUCERS OIL	1.00 lt
REAR WHEEL REDUCERS OIL	1.00 lt
FRONT AXLE DIFFERENTIAL OIL	7.40 lt
REAR AXLE DIFFERENTIAL OIL	7.60 lt
GEAR BOX OIL	1.50 lt
HYDRAULIC PLANT OIL	170lt
BRAKING CIRCUIT OIL	1.2 lt
REFRIGERANT LIQUID	7.0 lt
DIESEL FOR GREASE	105 lt
TRACTION	4 Kg

AGRI STAR 37.8

UNIT DESCRIPTION	CAPACITY
ENGINE OIL	10.00 lt
FRONT WHEEL REDUCERS OIL	1.00 lt
REAR WHEEL REDUCERS OIL	1.00 lt
FRONT AXLE DIFFERENTIAL OIL	7.40 lt
REAR AXLE DIFFERENTIAL OIL	7.60 lt
GEAR BOX OIL	1.50 lt
HYDRAULIC PLANT OIL	170lt
BRAKING CIRCUIT OIL	1.2 lt
REFRIGERANT LIQUID	7.0 lt
DIESEL FOR GREASE	105 lt
TRACTION	4 Kg

AGRI STAR 38.10

UNIT DESCRIPTION	CAPACITY
ENGINE OIL	10.00 lt
FRONT WHEEL REDUCERS OIL	1.00 lt
REAR WHEEL REDUCERS OIL	1.00 lt
FRONT AXLE DIFFERENTIAL OIL	7.40 lt
REAR AXLE DIFFERENTIAL OIL	7.60 lt
GEAR BOX OIL	1.50 lt
HYDRAULIC PLANT OIL	170lt
BRAKING CIRCUIT OIL	1.2 lt
REFRIGERANT LIQUID	7.0 lt
DIESEL FOR GREASE	105 lt
TRACTION	4 Kg

AGRI STAR 35.10

UNIT DESCRIPTION	CAPACITY
ENGINE OIL	10.00 lt
FRONT WHEEL REDUCERS OIL	1.00 lt
REAR WHEEL REDUCERS OIL	1.00 lt
FRONT AXLE DIFFERENTIAL OIL	7.40 lt
REAR AXLE DIFFERENTIAL OIL	7.60 lt
GEAR BOX OIL	1.50 lt
HYDRAULIC PLANT OIL	170lt
BRAKING CIRCUIT OIL	1.2 lt
REFRIGERANT LIQUID	7.0 lt
DIESEL FOR GREASE	105 lt
TRACTION	4 Kg

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

OIL COMPARISON TABLE

	ENGINE OIL	HYDRAULIC OIL	AXLE OIL	BRAKES AND INCHING OIL	RADIATOR	GREASE
AGIP	SIGMA TURBO	ARNICA/46		DEXRON 2 EXTRA	PERMANENT	GR MU/EP2
CHEVRON	DELO 450 15W40	EP HYDRAULIC 46		DEXRON 2	ANTIFREEZER	DURALITH EP2
ESSO	ESSOLUBE XT 201	INVAROL EP46	TORQUE FLUID 62	ATF DEXRON 2	SIGIL GREEN	BEACON EP2
IP	TAURUS TURBO 15W40	HJDRUS		DEXRON FLUID 2	ANTIFREEZER	ATHESIA EP GREASE2
MOBIL	DELVAC SUPER 1300	HJDRO NV46	1 - MOBILFLUID 422 2 - MOBILFLUID 424 3 - MOBILUBE 85W/90 LS 4 - MOBILAND 20W/40	ATF 220	ANTIFREEZER	MOBILUX 2
Q8	T700 SAE 15W40	HAENDEL 46		AUTO 14	ANTIFREEZER	SUPER GREASE G2
SHELL	RIMULDA D	TELLUS T46	1 - DONAX TD 2 - LS 90 3 - SPIRAX HD	ATF DEXRON 2	ANTIFREEZER	SUPER GREASE G2
ROLOIL	DOLOMITI SUPER HD TURBO 15W40	LI/46		HIDROMATIC DEX	ROL FLUID	LITEX EP/2
TEXACO	URSA SUPER TD	RANDO HD Z 46		DEXRON 2	ANTIFREEZER	MULTIFAK EP2
TOTAL	RUBIA XT	EQUIVIS ZS/46	1 - DA 2 - JID	DEXRON 2	ANTIFREEZER	MULTIS EP2

- ATTENTION -

FOR CONSUMPTION QUANTITIES OF THE PRODUCTS SEE “CAPACITY OF PARTS TO LUBRICATE IN CHAPTER “**G**” (VEHICLE TECHNICAL DATA AND TECHNICAL FEATURES)

- PROHIBITED -

DO NOT USE SYNTHETIC-BASED OIL

***DIECI* DECLINES ALL LIABILITY IF OILS DIFFERENT TO THOSE RECOMMENDED ARE USED.**

BATTERY ISOLATOR SWITCH

(fig.1/D Pos.”1”)

The battery isolator switch is in the hole of the engine bonnet lateral sheet steel.
Its function is to cut off power to the electrical system, opening the circuit on the negative pole.

- Turn the handle, bringing it to a position in which its long side is perpendicular to the ground in order to open the circuit and cut out electrical power (fig.2/D Pos.”2”).

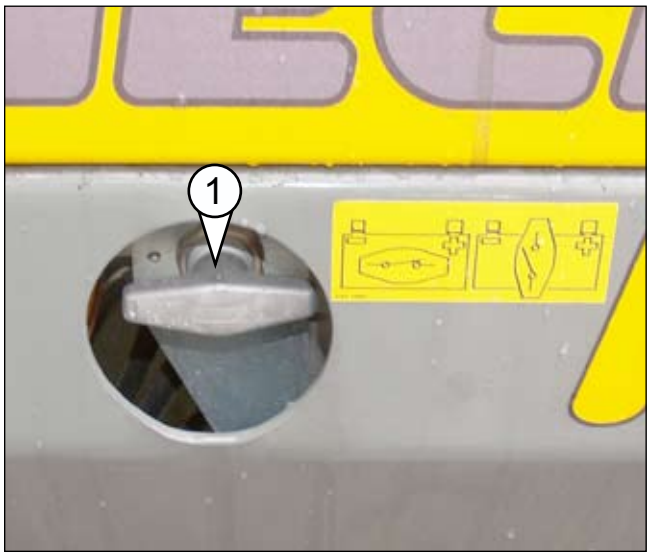
- Turn the handle moving it back to start position (fig.1/D Pos.”1”) to reset starting conditions and close the circuit.

- ATTENTION -

the battery isolator switch must be used only with the vehicle off.

- ATTENTION -

Use the battery isolator switch to open the electrical circuit each time the vehicle is serviced.



(fig.1/D) Routine work position - Closed circuit

(fig.2/D) Maintenance position - Open circuit

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

OPENING THE ENGINE BONNET
(fig.4/D)

- PROHIBITION:

IT IS PROHIBITED to open the engine bonnet with the diesel engine running. Before opening the bonnet, switch the engine off and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”, disconnect the battery by acting on the “battery isolator switch” see page D/16.

To open the engine bonnet, pull the lever (fig.3/C Pos.”1”) towards the front of the vehicle, until it clicks.

To re-insert the block, just close the engine bonnet with slight pressure. Always check that it is closed correctly before starting to operate or before moving away from the vehicle.

- PROHIBITION:

it IS prohibited TO OPERATE with the engine bonnet open.

To insert the locking rod (fig. 4/D Pos.”2”):

- Push the bonnet up by hand and support it.
- Grip the support rod with the other hand (fig.4/D Pos.”2”) situated on the engine bonnet lateral guard (fig.4/D Pos.”3”).
- Take the rod inside the opening lock (fig.4/D Pos.”1”).
- Leave the bonnet gradually to check that the rod is correctly inserted as does not become unhooked.

- ATTENTION:

Before leaving the bonnet, always check that the support rod holds the bonnet open safely.
Be careful not to injure the hands.

To close the bonnet:

- Hold the bonnet up with one hand
- Put the rod in its seat (fig.4/D Pos.”3”) accompanying it with the other hand.
- Accompany the bonnet down to lower.
- Apply a slight pressure on the bonnet at end run to insert the closure lock.

- ATTENTION:

Once the lock is disengaged, take due care not to cause the sudden fall of the bonnet, risk of crushing.

- ATTENTION:

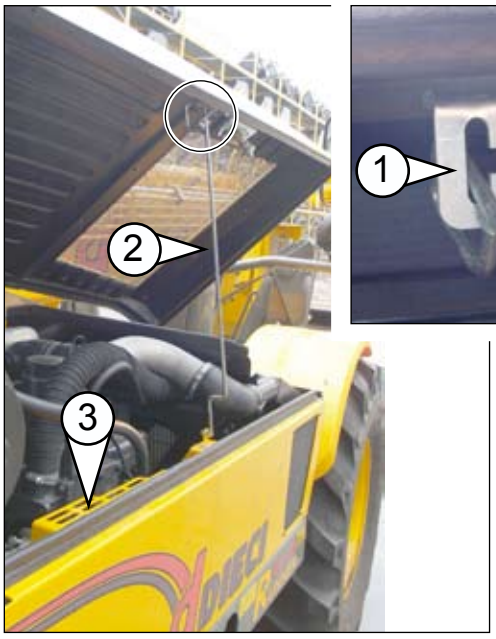
Do not underestimate the weight or overall dimensions of the bonnet.

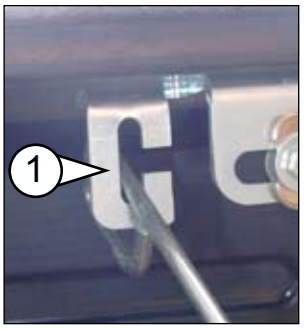
- PROHIBITED -

IT IS PROHIBITED
to operate with the bonnet open.

Once maintenance operations have been completed the the bonnet must always be closed and locked.

(fig.3/D)





(fig.4/D)

ENGINE

FOR ENGINE, FUEL FILTER MAINTENANCE ETC. CAREFULLY FOLLOW THE MANUFACTURER'S INSTRUCTIONS PROVIDED IN THE SPECIALLY INCLUDED HANDBOOK.

THE ENGINE USE AND MAINTENANCE HANDBOOK IS AN INTEGRAL PART OF THE DOCUMENTATION SUPPLIED WITH THE VEHICLE.
IT MUST ALWAYS BE KEPT IN THE CAB.

(fig.5/D)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

UNDERSIDE PROTECTION REMOVAL

To perform the maintenance interventions listed below, the vehicle underside protection must be temporarily removed from the vehicle.

⚠ - ATTENTION - ⚠

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

(fig.6/D)

The underside protections protect the bottom of the vehicle and the mechanics applied from any blows, collisions, dirt.

The vehicle has two underside protections:

- Chassis Front Underside Protection (fig.6/D Pos.”A”)
- Engine Underside Protection (fig.6/D Pos.”C”)

Remove the chassis front underside protection (fig.6/D Pos.”A”) to perform the following maintenance:

- Lubrication of cross and Cardan transmission shafts
- Check gear oil level
- Replace gear oil

(fig.7/D)

Engine Underside Protection (fig.6/D Pos.”B”) to perform the following maintenance:

- Replace Diesel engine oil
- Replace Diesel engine oil filter
- Replace Diesel engine fuel filter

⚠ - ATTENTION:

Remove the underside protection only after having:

- Take the vehicle onto firm and level ground.
- Retracted and lowered the boom
- Position cylinders in transport mode.
- Switched the engine off and removed the ignition key.
- Positioned a plate in the cab indicating “maintenance in progress”.
- Disconnect the battery by acting on the “battery isolator switch” see page D/16.

⚠ - ATTENTION:

Remove the guards and underside protection with care, taking all of the precautions necessary in order to prevent damage and/or injury. Once maintenance operations have been completed, remount the guards and underside protections.

⚠ - ATTENTION:

For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16

PEDALS

Accelerator
(fig.10/D Pos.”1”)

The accelerator is a cable type accelerator, and as such it does not require routine maintenance.

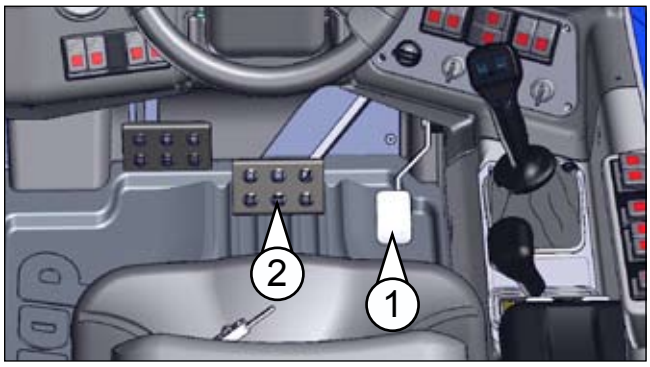
brakes
(fig.10/D Pos.”2”)

Hydraulic brakes do not require registration.

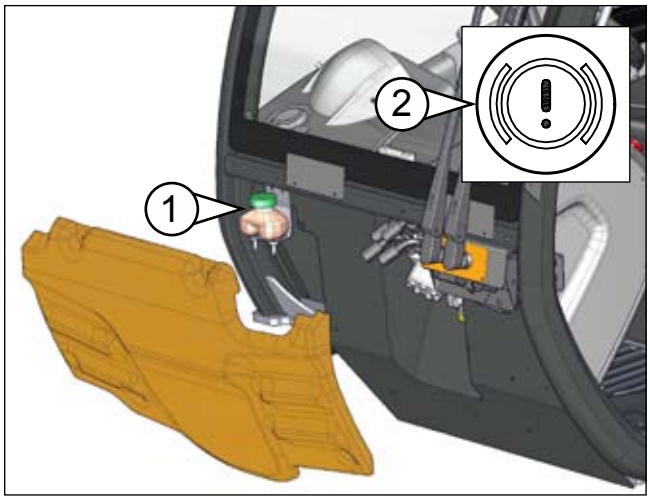
Check the reservoir found in the front of the cab under the guard (fig.11/D Pos.”1”) regularly. Oil must always be level; or rather the reservoir must always be full.

The intermittent switch-on of the indicator light on the dashboard (fig.11/D Pos.”2”), indicates the low level in the reservoir. On switch-on of the indicator light, immediately interrupt the work operations and top up the reservoir, taking the oil to the correct level.

Before re-starting the work operations, make sure that the light on the dashboard is off and brake a few times at low speed (2km/h) for a brief tract (10m) in order to check regular functioning.



(fig.10/D)



(fig.11/D)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

⚠ - *ATTENTION* - ⚠

IT IS MANDATORY TO USE
INDIVIDUAL PROTECTION DEVICES (I.P.D.)
to perform maintenance/control operations.

To top up:
- Take the vehicle onto firm and level ground.
- Retract the boom completely and lower it.
- Position cylinders in transport mode.
- Switch the engine off and remove the ignition key.
- Position a plate in the cab indicating “maintenance in progress”.
- Disconnect the battery by acting on the “battery isolator switch” see page D/16.
- Unscrew tank cap (fig.12/D Pos.”1”), turning it anti-clockwise.
- Check that oil is level. If it is not, fill the reservoir (fig.12/D Pos.”2”).
- Screw on the tank cap, turning it clockwise. Do not tighten it too much.
- Clean any spillage.

A slight lowering of the level is due to normal consumption of brake pads.

If the brake pedal seems too ‘elastic’, contact your dieci dealer to have this fault corrected.

⚠ - *ATTENTION:*

Do not press the brake pedal until top-up has been completed. Check that the tank has been closed before acting on the pedal.

⚠ - *ATTENTION:*

Periodically check the condition of all brake pipes and tubes. If the level is drastically reduced there is a system leak. Contact your dieci dealer to replace all damaged, corroded or worn tubes.

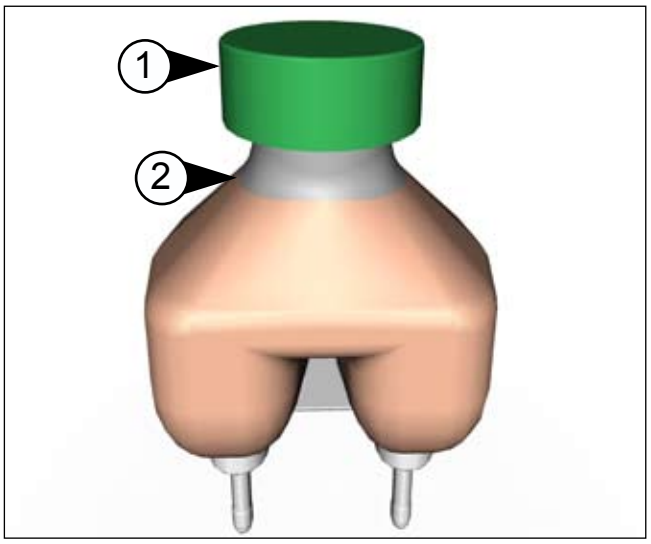
⚠ - *ATTENTION:*

Always use the recommended type of oil, as indicated in the lubrication table.
This type of oil can ruin coated surfaces and plastic dashboard parts.

For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety” paragraph page B/16

“INCHING” pedal
(fig.13/D pos.”3”)

The pedal does not require any regulation because it is in direct contact with the inching valve.



(fig.12/D)

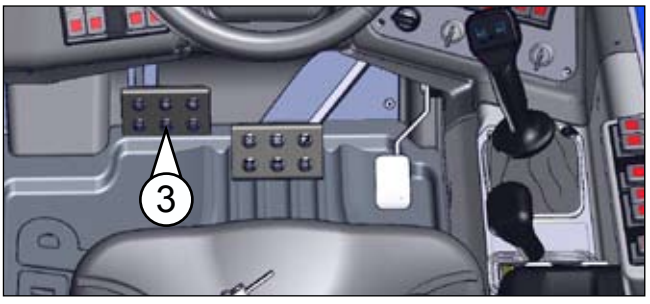
⚠ *ATTENTION* ⚠

Id indicator light “2” should switch on (fig.11/C) the parking brake is blocked.

⊘ - *PROHIBITED* - ⊘

IT IS PROHIBITED
to operate when brake oil is not level.

The brakes could function irregularly, creating a risk of accidents.



(fig.13/D)

PARKING BRAKE

(fig.15/D pos."1")

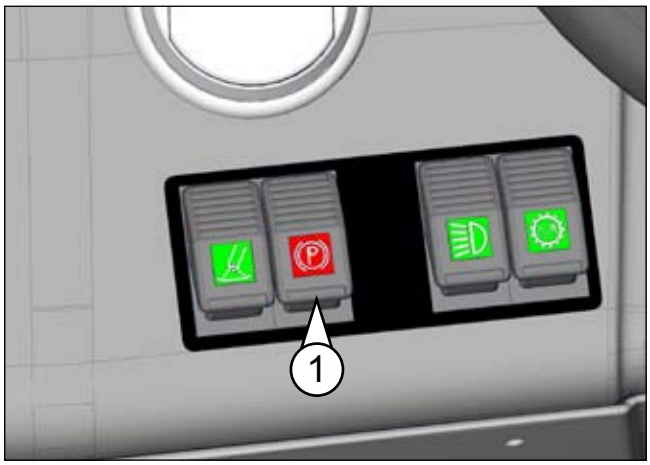
The electrically controlled parking brake does not need routine maintenance.

- ATTENTION:

In the event the parking brake fails do not use the vehicle.

If the brake is not efficient, inform the ***DIECI*** Dealer in order to eliminate the defect.

Unauthorised modifications of the rear axle ratio, the vehicle weight, or wheel and tyre dimensions may compromise proper functioning of the parking brake.



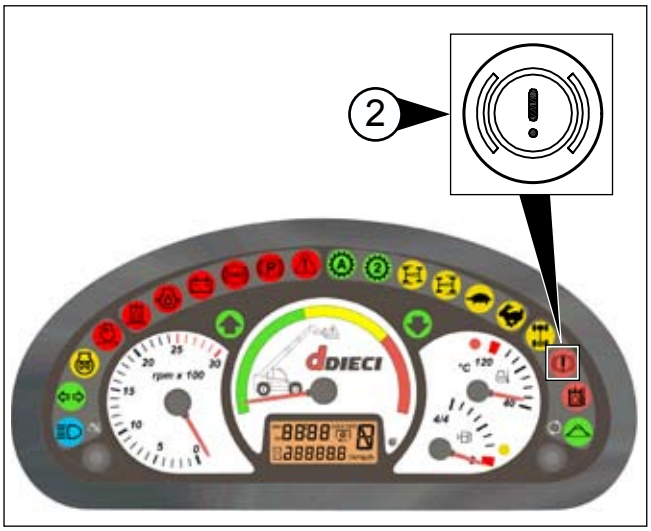
(fig.15/D)

- ATTENTION -

If the indicator light "2" switches on (fig.16/C) the parking brake is blocked.
DO NOT ADVANCE WITH THE VEHICLE.

consult the "brakes" paragraph (page D/20) in this manual to top-up the brakes oil.

If the indicator light should remain on, contact a dieci after-sales centre.



(fig.16/C)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

HYDRAULIC OIL LEVEL
(fig.17/D Pos.”2”)

The hydraulic oil tank is located under the driver cab (fig.17/D Pos.”1”). The level can be checked through the transparent cap (fig.17/D Pos.”2”) positioned on the side of the tank itself, near to the steps.

The level is correct when the oil can be seen through the transparent cap (fig.17/D Pos.”2”) with all vehicle cylinders in transport position.

To correctly check the level:
- Park the vehicle on a level and compact surface.
- Retract the boom completely and lower it.
- Position cylinders in transport mode.
- Switch off the engine.
- Check the oil level using the transparent indicator.

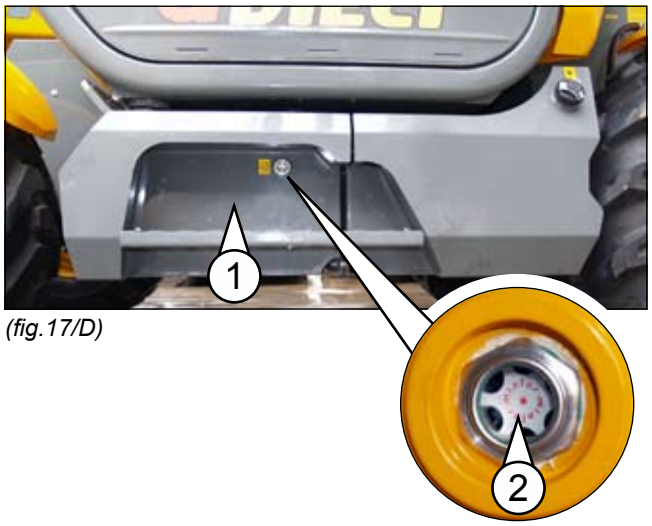
- ATTENTION -
IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

If the oil is not level, carry out the following operations:
- Park the vehicle on a level and compact surface.
- Retract the boom completely and lower it.
- Position cylinders in transport mode.
- Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
- Disconnect the battery by acting on the “battery isolator switch” see page D/16.
- Remove the rubber mat inside the driver cab (fig.18/D Pos.”1”).
- Remove the lower guard located under the rubber mat (fig.18/D Pos.”2”)
- Remove the rubber caps from the slots in the lower floor (fig.19/D Pos.”1”).
- Remove both tank filling caps (fig.19/D Pos.”2”).
- Pour the oil recommended by dieci from one of the two filling holes (fig.19/D Pos.”2”).
  Top up the quantity necessary to bring it back to level.
- On completion of the top-up operation, tighten the top-up caps and re-position as in initial condition.

Routine maintenance should be carried out at the prescribed intervals.

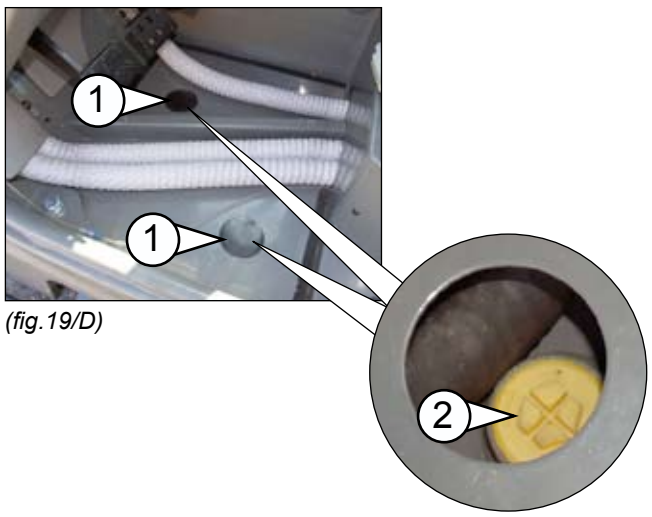
- ATTENTION:
For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16

- ATTENTION:
When topping up, do not exceed level and immediately clean any spillage.



(fig.17/D)

(fig.18/D)



(fig.19/D)

CHANGINGHYDRAULICOILANDREPLACINGFILTERS

Inside the tank there are two mesh filters are present inside the tank. These prevent any hazardous particles from entering the hydraulic system.

The replacement of hydraulic oil and internal tank filters must always be carried out in order. It is not possible to service only one of the two components.

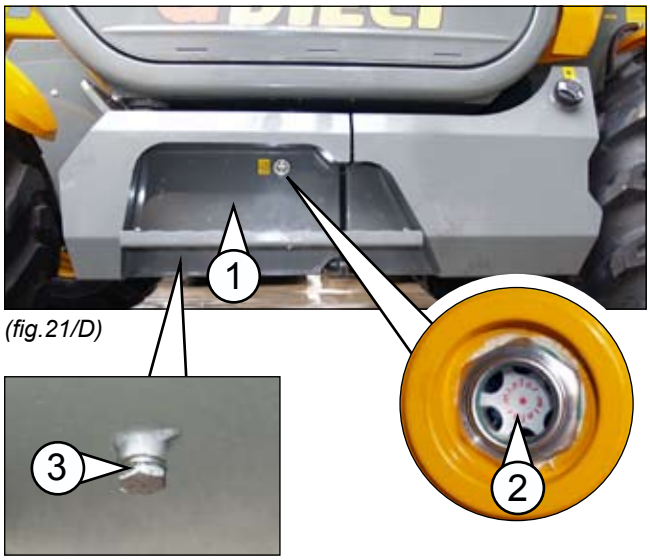
⚠ - ATTENTION - ⚠
IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

For correct oil change:

- Park the vehicle on a level and compact surface.
- Retract the boom completely and lower it.
- Position cylinders in transport mode.
- Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
- Disconnect the battery by acting on the “battery isolator switch” see page D/16.
- Place a suitable capacity container under the drain plug (fig.21/D Pos.”3”) positioned under the oil tank.
- Remove the rubber mat inside the driver cab (fig.22/D Pos.”1”).
- Remove the lower guard located under the rubber mat (fig.22/D Pos.”2”)
- Remove the rubber caps from the slots in the lower cab (fig.23/D Pos.”1”).
- Unscrew the drain plug (fig.22/D Pos.”3”) to allow the oil to flow out.
- Remove the filling cap (fig.23/D Pos.”2”) to accelerate emptying.
- On completion, replace the filters inside the tank.
- Reinsert the drain plug (fig.21/D Pos.”3”).
- Fill up the tank to level via its filler cap (fig.23/D Pos.”2”).
- Once the tank has been filled, tighten the filler cap .
- Start up the vehicle and move hydraulic cylinders to discharge any air bubbles.
- Check the hydraulic oil level again and top up if necessary.
- On completion of the replacement and top-up operations, tighten the tip-up caps and re-position everything as in the initial condition.

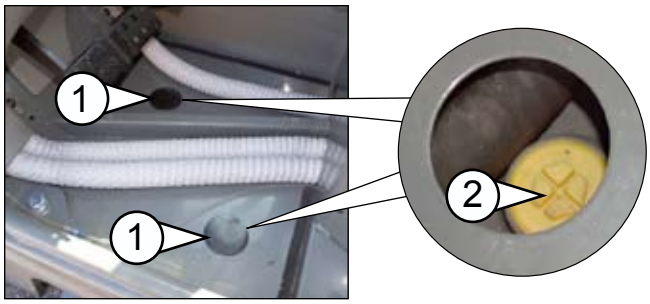
⚠ - ATTENTION:
For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16

⚠ - ATTENTION:
To change the oil and replace the filters, contact a ***DIECI*** after-sales centre.



(fig.21/D)

(fig.22/D)



(fig.23/D)

⚠ ATTENTION ⚠
Waste oil is potentially harmful to the environment and must be disposed of appropriately.

⚠ - CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

HYDRAULIC FILTER
(fig.24/D pos."1")

- ATTENTION -
IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

Operate as follows to correctly replace:

1. Park the vehicle on a level and compact surface.
2. Retract the boom completely and lower it.
3. Switch off the engine and remove the ignition key, hang up a sign in the cab that reads "maintenance work under way".
4. Disconnect the battery by acting on the "battery isolator switch" see page D/16.
5. Place a container under the filter to collect any oil that may come out during replacement.
6 Remove the protective guard (fig.25/D Pos"1").
7. Remove the filter cartridge, unscrewing it using a ribbon spanner (fig.26/D).
8. Clean the filter support with a clean cloth which will not leave felt, making sure the old sealing ring is removed.
9. Take the new dieci-approved filter. Lubricate with the same oil as used on the oil seal gasket.
10. Screw in the filter using only your hands, taking care to set the lubricated oil gasket in its proper position.
11. Switch on the vehicle and make sure there are no leaks.

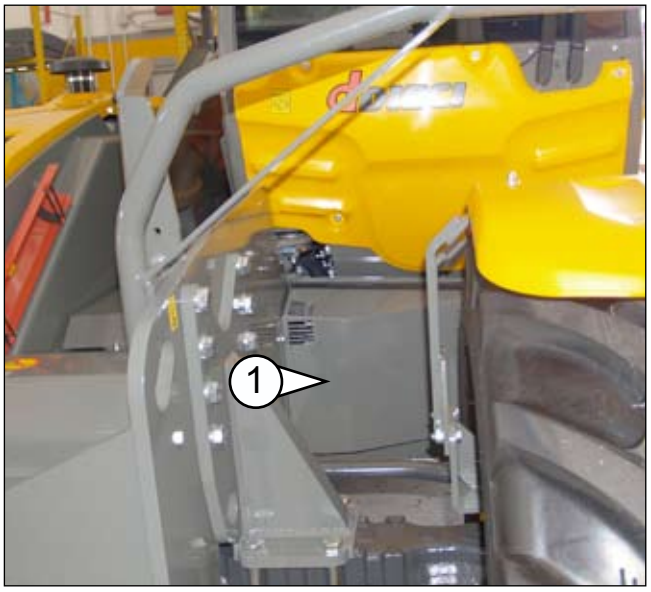
- ATTENTION:
On conclusion of the operations, re-mount the protection guard (fig.25/D pos."1").

- ATTENTION:
Waste oil is potentially harmful for the environment and must be disposed of appropriately.

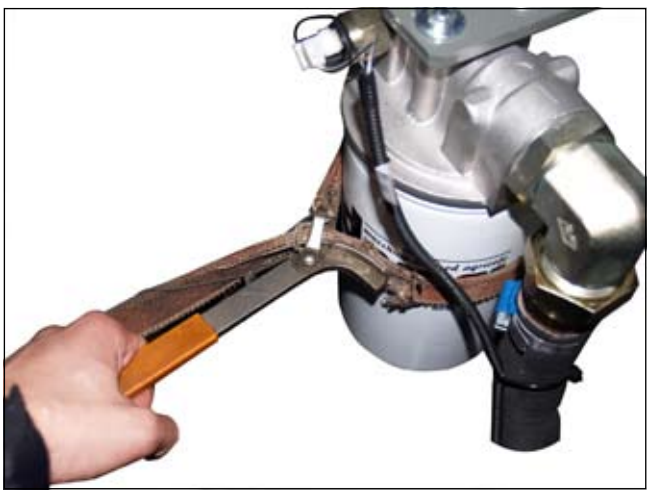
- ATTENTION:
To replace the filterscontact a *DIECI* after-sales centre.

- ATTENTION:
For the safety specifications, refer to chapter "B", "Carrying out maintenance in safety " paragraph page B/16.

(fig.24/D)



(fig.25/D)


(fig.26/D)

FUEL TANK
(fig.29/D Pos.”1”)

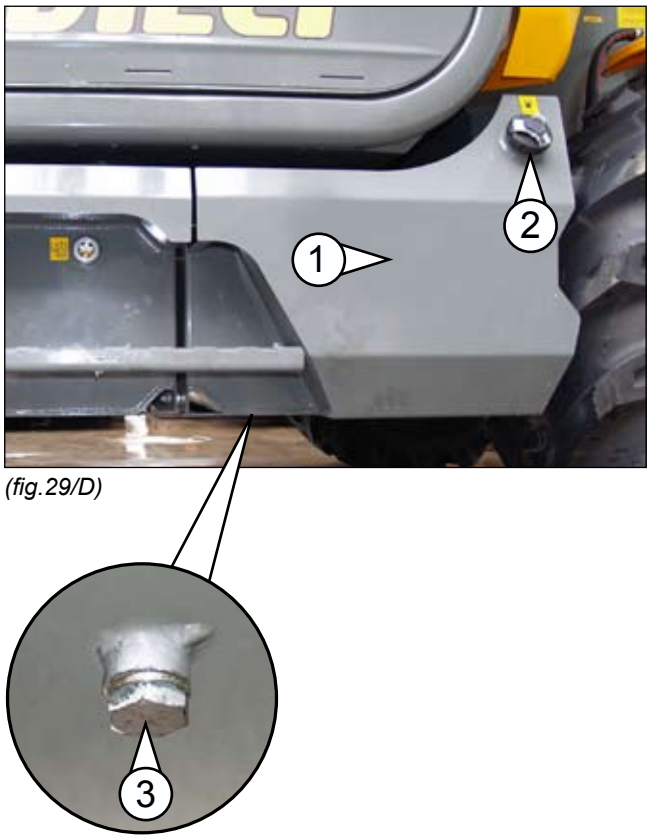
cleaning

- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

For correct cleaning:

1. Park the vehicle on a level and compact surface.
2. Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
3. Disconnect the battery by acting on the “battery isolator switch” see page D/16.
4. Place a container of suitable capacity under the drain plugs (fig.29/D Pos.”3”) to collect fuel that may leak out during cleaning.
5. Unscrew the tank’s filler cap (fig.29/D Pos.”2”).
6. Unscrew the tank’s drain cap, situated under the cap (fig.29/D Pos.”3”)
7. Let fuel drain, then top up ten litres of clean fuel through the top up opening to eliminate any residual impurities.
8. Re-insert the drain cap and tighten it securely.
9. Top up the tank with clean fuel and replace cap.



(fig.29/D)

- ATTENTION:

For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16.

- ATTENTION -

Fuel is highly inflammable.

Do not smoke or approach with an open flame during these operations.

risk of fire or explosion.

- ATTENTION -

Waste fuel is potentially harmful for the environment and must be disposed of appropriately.

- ATTENTION -

to clean and drain the diesel tank, contact a *DIECI* after-sales centre.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

WATER RADIATOR/OIL/INTERCOOLER

- ATTENTION -

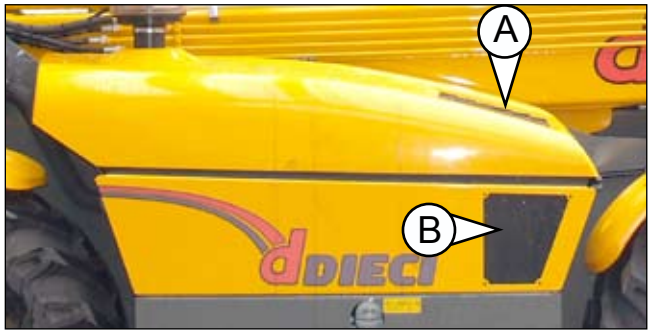
THESE OPERATIONS MUST BE CARRIED OUT WHEN THE ENGINE IS OFF AND COLD.

For specifications regarding safety refer to chapter “B”, paragraph “Carrying out maintenance in safety ” page B/16.

Radiator grill cleaning

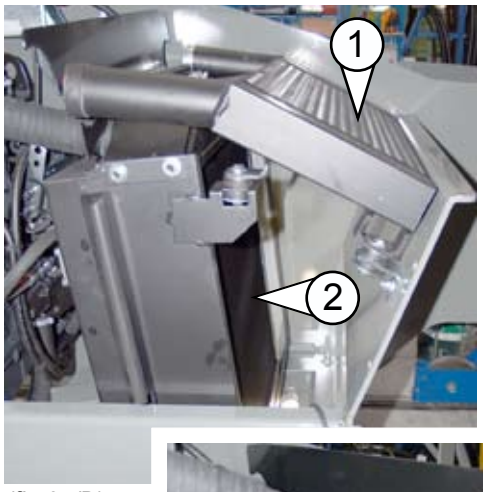
- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.



(fig.36/D)

Radiator grills (fig.37/D Pos.”1”,”2”,”3”) and air recirculation networks (fig.36/D Pos.”A-B”) must be kept as clean as possible to allow for maximum heat exchange between the radiator and the circulating air. To remove impurities, use a low pressure air jet directing it from the inside towards the outside. Then pass the jet of air on the inner parts covered with dirt. If dirt is particularly compact, soften it with a low pressure water jet before using the air. Remove guards “1” and “2” (fig.41/D) to ease removal of the dirt from the radiators and engine bonnet, preventing it accumulating in the bottom. Position a container under the guard and under the engine underside protection in order to collect the dirt and prevent it being dispersed on the ground.



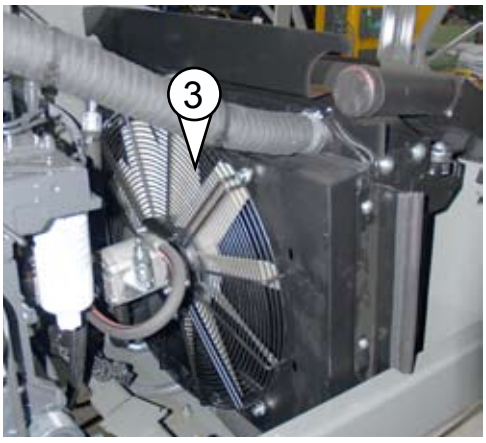
(fig.37/D)

- ATTENTION:

Consult the engine operation and maintenance handbook before using jets of air or water.

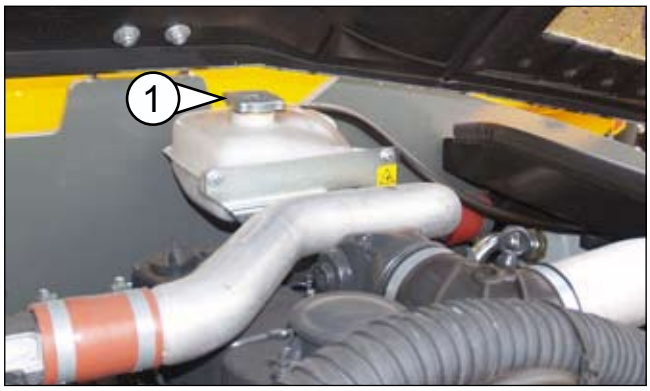
- ATTENTION:

Heat exchange flaps are very delicate. Do not use rags or brushes to clean them. Jets of water and air must be directed perpendicularly to the surface of the radiator.



cooling liquid level check

During normal vehicle use, the water level should be at 3 cm under the radiator cap (fig.38/D Pos.”1”).



(fig.38/D)

- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

Verification of the correct level of cooling liquid must be carried out as follows:

1. Park the vehicle on a level and compact surface.
2. Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
3. Disconnect the battery by acting on the “battery isolator switch” see page D/16.
4. Wait for the engine to cool.
5. Slowly turn the radiator ca (fig.38/D Pos.”1”) anti-clockwise until reaching the safety pin.
6. Discharge residual steam.
7. Remove the cap.
8. Check the coolant level. If necessary, top up using a mixture of water and antifreeze.
9. To reinsert the cap follow these steps in the opposite order.

- ATTENTION:

If frequent top ups are necessary in normal working conditions, verify that there are no cooling system leaks. Contact a ***DIECI*** after-sales centre if problems arise.

- ATTENTION -

Always use demineralised water to fill the cooling system. Hard water causes deposits and premature aging of the system.

Replacing cooling liquid

- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

For correct replacement of cooling liquid:

1. Park the vehicle on a level and compact surface.
2. Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
3. Disconnect the battery by acting on the “battery isolator switch” see page D/16.
4. Wait for the engine to cool.
5. Place a container under the radiator to collect any cooling liquid which may come out during replacement.
6. Remove the cleaning/inspection guards (fig.41/D, pos.”1-2”) in order to ease draining of the liquid and access the sleeves.
7. Remove the sleeve (fig.42/D, pos.”1”) to allow water to flow away from the radiator
8. Remove the filling plug (fig.40/D, pos.”1”) to accelerate emptying.
9. Allow the cooling circuit to drain completely.
10. Check the conditions of the sleeves and their fastenings. Replace them if necessary.
11. Rinse the radiator with clean water, pouring it in the top up cap (fig.40/D Pos.”1”), making it drain through the sleeve inlet (fig.42/D Pos.”1”). If necessary, add a detergent product to the clean water.
12. When cleaning has been completed, close the drain orifice, re-inserting the sleeve (fig.42/D Pos.”1”).
13. Fill up the cooling system from the cap (fig.40/D Pos.”1”) up to level (3 cm below the radiator cap) with the previously prepared cooling liquid.
14. Close the cap (fig.40/D Pos.”1”) and switch the engine on allowing it to tick over for a few minutes.
15. Make sure that there are no leaks, check the level and, if necessary, add more liquid.

- ATTENTION:

Waste coolant is potentially harmful to the environment and must be disposed of appropriately.

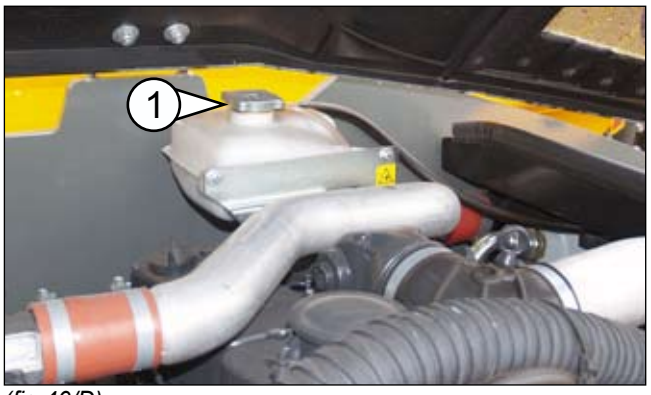
- ATTENTION -

Always use demineralised water to fill the cooling system. Hard water causes deposits and premature aging of the system.
The radiator must always be filled with a distilled water and anti-freeze solution in order to prevent corrosions and freezing of the water in the system.

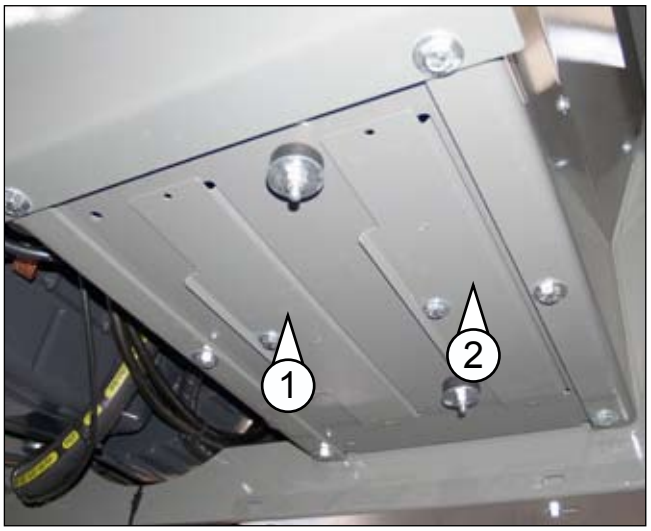
THE MIXTURE PERCENTAGES CAN BE FOUND ON ANTIFREEZE CONTAINERS.

- ATTENTION -

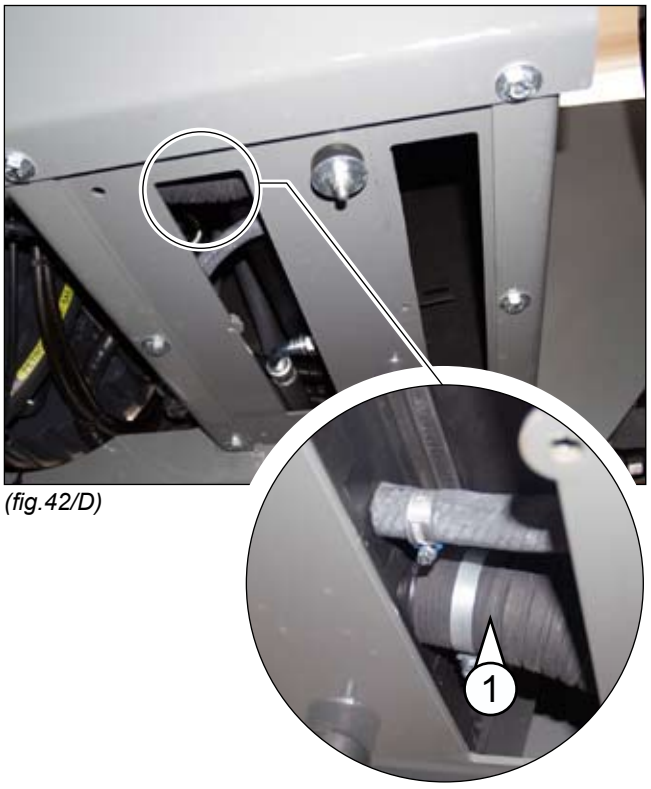
to change the refrigerant liquid contact a *DIECI* after-sales centre.



(fig.40/D)



(fig.41/D)



(fig.42/D)

ENGINE AIR FILTER

(fig.44/D Pos.1)

Indications/Control/Replacement

- ATTENTION -

THESE OPERATIONS MUST BE CARRIED OUT WHEN THE ENGINE IS OFF AND COLD.

For the safety specifications, refer to chapter "B", "Carrying out maintenance in safety " paragraph page B/16

An air filter in poor conditions can cause a reduction in power, excessive fuel consumption and shorten engine life.

Filter clogging is signalled by an optical indicator (fig.44/D Pos."2").
When the indicator is blocked in the red position, maintenance or replacement must be performed because it is clogged. After the due interventions have been performed, press the head of the same to take it into the rest position. On indication of the clogging signal, it is possible to operate for no longer than one hour.

The filter is cleaned using compressed air, maximum 3 Bar at a distance not shorter than 150mm paying great attention not to damage the filtering element.
Use a wet cloth which will not leave residue to clean the box and sheet steel cover.

During assembly of the filter, the valve (fig.44/D Pos."3") must always be positioned in the lowest part possible with respect to the filter. If this is not the case, the expulsion functionality is compromised, reducing the lifespan of the filter.

- ATTENTION:

Periodically check the state of the dust discharge valve and replace it if deteriorated.

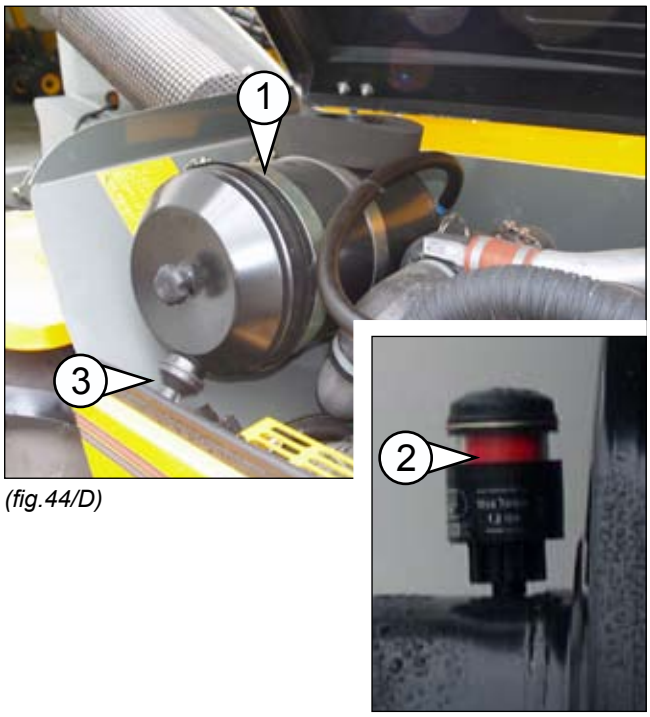
- ATTENTION:

Clean filters only when the indicator light signals clogging or at scheduled maintenance intervals. Unnecessary, frequent cleaning exposes components to handling damage which can allow dust and dirt to pass into the filtering phases, causing damage to the engine.

- ATTENTION:

If the filtering elements come into contact with liquids of any type, they must be replaced.

Regularly check the suction sleeves and replace them immediately if worn or damaged. Regularly check that bolts and clamps are properly tightened. No air should be allowed to enter the engine without having first passed through the filter.



(fig.44/D)

- PROHIBITED -

IT IS PROHIBITED
to operate without engine air filter.

The engine suctions in air continuously during use. Dust that enters into circulation can cause serious system damage.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

Replace engine air filter.

- ATTENTION -

IT IS MANDATORY TO USE
INDIVIDUAL PROTECTION DEVICES (I.P.D.)
to perform maintenance/control operations.

1. Turn knob “1” (Fig.45/D) anti-clockwise and remove the lid “2” (Fig.45/D).
2. Export the knob “3” (Fig.46/D) by screwing it anti-clockwise in order to extract the pre-filter ”4” (Fig.47/D).
3. Extract the prefilter “4” (Fig.47/D).
4. Remove the filter “7” (Fig.49/D) from the body by loosening the bolt ”5” (Fig.48/D) with a wrench as in figure, paying attention not to loose or damage the washer “6” (Fig.48/D).
5. Clean and replace the filters and re-mount everything carrying out the same operations in the opposite order, taking care not to tighten the bolts and knobs excessively.

- ATTENTION:

Do not operate with an improperly assembled or damaged filter.

- ATTENTION:

For the complete efficiency of the filter, it is advised to operate with the filter complete with all parts and components. All worn parts should be replaced as quickly as possible.

- ATTENTION:

These operations must be carried out by competent, trained personnel.

- ATTENTION:

To reduce the maintenance of the engine air filter, contact a *DIECI* after-sales centre.

Replacing the engine air filter sealing ring
(fig.50/D Pos.1)

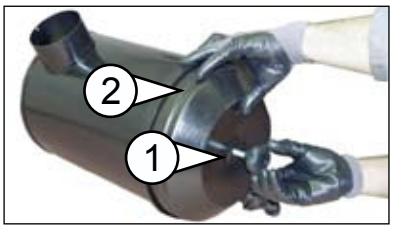
A sealing ring is present in the lid in order to prevent draughts of air. Due to atmospheric agents, the rubber of which it is composed, tends to deteriorate, meaning it must be replaced when cracks appear. Use a small flat screwdriver to remove it. To insert the new gasket, rest this in its seat and insert it exerting slight pressure. The sealing ring will be taken exactly into its seat, remounting the lid.

- ATTENTION:

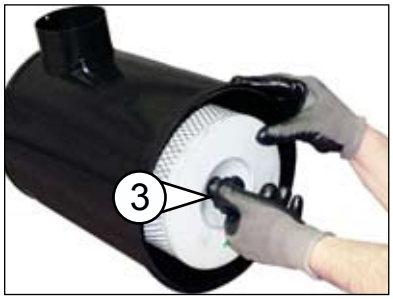
Do not use screwdrivers or other pointed tools that can damage the sealing ring during insertion.

- PROHIBITED -

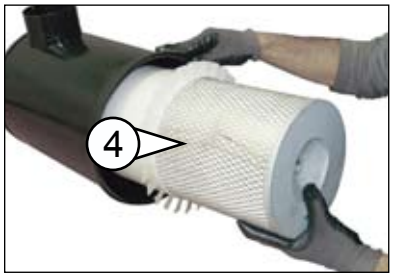
IT IS PROHIBITED to use the vehicle
with engine air filter without sealing ring.



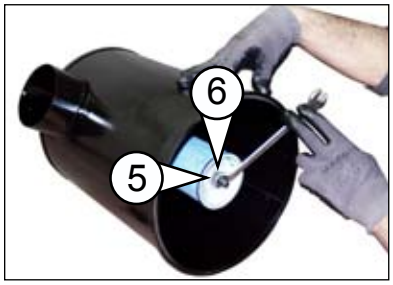
(fig.45/D)



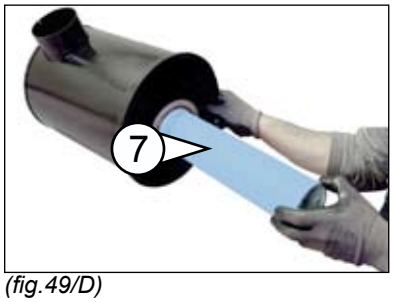
(fig.46/D)



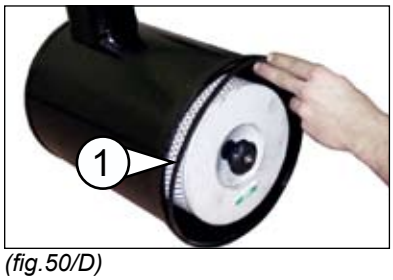
(fig.47/D)



(fig.48/D)



(fig.49/D)



(fig.50/D)

CAB VENTILATION FILTER

(fig.56/D Pos.”1”)

Routine maintenance should be carried out at the prescribed intervals.

On changing the cab ventilation filter, clean the intake pipe (fig.56/D Pos.”2”) using a jet of air from the inside of the cab to the outside. The cab filter should be replaced every 250 working hours. Clean the air intake grill (fig.57/D Pos.”1”) at the end of every working day using a jet of air.

- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

Below find the correct sequence of replacement operations:

1. Park the vehicle on a level surface.
2. Completely retract and lower the boom.
3. Switch the engine off and remove the ignition key. Position a plate in the cab indicating “maintenance in progress”.
4. Remove the guard, in the left of the seat (fig.55/D Pos.”1”), by unscrewing the fastening screws.
5. Remove the worn filter and insert the new one (fig.56/D Pos.”1”).
6. Reassemble the guard.
7. Restart the engine with the fan moving to verify that the operation is correct.

- ATTENTION:

Do not clean the clogged filter with air or water and re-use. At the end of its life, the filter loses determined features which cannot be restored.

- IMPORTANT:

In the event of vehicle use in particularly dust rich environments (haylofts, etc.); the filter life is reduced by 100 hours.

If the ventilation system malfunctions check for filter clogging.

In the event that malfunctions persist even after filter replacement, contact a dieci service centre.

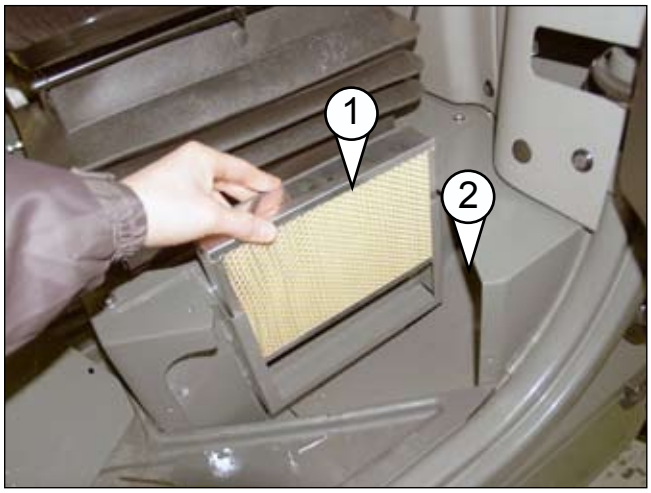
- ATTENTION:

Do not use the vehicle without a cab filter. Dust that enters the cab can cause health risks for the operator and ventilation system malfunction.

- ATTENTION:

For replacement of the engine air filter, contact a *DIECI* after-sales centre.

(fig.55/D)



(fig.56/D)

(fig.57/D)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

AIR CONDITIONING (OPTIONAL)

Cleaning the system

- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

1. Park the vehicle on a level and compact surface.
2. Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
3. Disconnect the battery by acting on the “battery isolator switch” see page D/16.
4. Wait for the engine to cool.
5 Remove the protective guard (fig.58/D Pos”1”).
6. Clean the condenser (fig.59/D Pos”1”), directing the compressed air, at a maximum pressure of 7 bar, through the radiant mass, from the side opposite the normal air flow. Jets of air must be directed perpendicularly to the surface of the radiator.
7. Be careful not to damage radiator flaps.
8. After cleaning, replace the condenser.

For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16.

- ATTENTION:

Should the conditioning system not work properly, immediately inspect the condenser.

check the gas load every year using the relevant cocks (fig.60/D Pos”2”).

- ATTENTION:

Replace the radiator filter (fig.59/D Pos”2”) every 2 years. Its breakage could cause serious damage to the conditioning system and cause the introduction of particles into the air that are harmful to the operator’s health. Turn on the air conditioning for two minutes every 15 days, even during the winter. In this way, the moveable parts like the compressor and the system in general can be lubricated. DO NOT loosen any air conditioning system tubes. Contact between the skin and coolant can cause freezing.

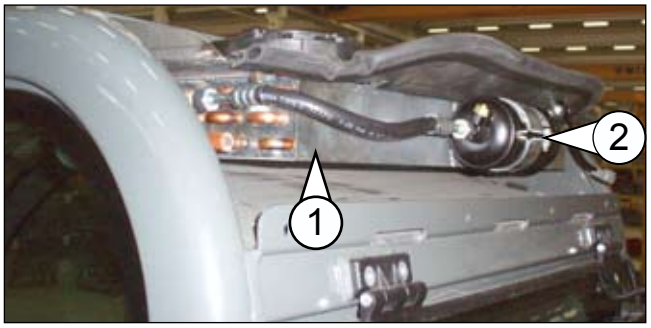
- ATTENTION:

for the maintenance of the air conditioning system, contact a *DIECI* after-sales centre.

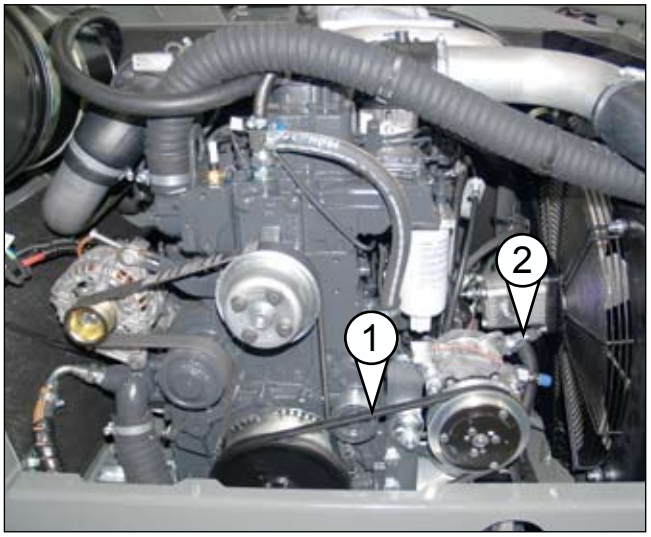
Compressor belt tension

1. Park the vehicle on a level and compact surface.
2. Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
3. Disconnect the battery by acting on the “battery isolator switch” see page page D/16.
4. Wait for the engine to cool.
5. Check the tension of the compressor belt (fig.60 Pos.”1”) every 500 hours.

(fig.58/D)



(fig.59/D)



(fig.60/D)

ATTENTION

Compressor belt tension must be checked in a *DIECI* after-sales centre.

CYLINDER BLOCK VALVES

Cylinder block valves hinder uncontrolled movement of the cylinder pistons in case of lacking hydraulic or bursting pressure of a flexible pipe.
The valves are directly mounted on the cylinders.

Verifying proper operation of cylinder non return valves

- ATTENTION:

Do not allow anybody near the vehicle while these checks are being carried out.

- ATTENTION:

One movement at a time should be checked during verifications.

- ATTENTION:

In the event of malfunction, do not use the vehicle until it has been repaired.
Contact a *DIECI* after-sales centre.

A) Boom raising cylinders: (fig.64/D)

1. Start up the engine. Make sure that the parking brake is engaged and the transmission in neutral.
2. Lift the boom to a 45° angle.
3. When the engine is running at 1400 RPMs, engage the control lever to lower the boom. During boom movement stop the engine. The boom must slow down and stop as the engine slows down and stops.

If the boom continues to move even after the motor stops, the boom raising cylinders are faulty. Repair the defect as quickly as possible, contact a ***DIECI*** service centre.

(fig.64/D)
(Boom lifting cylinder block valve)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

B) boom extension cylinder: (fig.65/D)

1. Start up the engine. Make sure that the parking brake is engaged and the transmission in neutral.
2. Raise the boom and extend it completely.
3. When the engine is running at 1400 RPMs, engage the control lever to retract the boom. During boom movement stop the engine. The boom must slow down and stop as the engine slows down and stops.

If the boom continues to move even after the engine is switched off, the block valve is faulty. Repair the defect as quickly as possible, contact a dieci service centre.

(fig.65/D)
(Boom internal extension cylinder block valve)

C) Fork swivel cylinder: (fig.66/D)

1. Start up the engine; pick up a load using the forks (example a load bricks or some hay bales). Tilt the forks completely backwards.
2. Engage the parking brake and put the transmission in neutral.
3. Lift the boom off the ground just enough necessary to allow the forward inclination of the forks.
4. When the engine is running at 1400 RPMs, engage the control lever to tilt the forks forward. During the fork movement stop the engine. Movement of the swivel must slow down and then stop as the engine slows down and stops.

If the forks continue to lower or move after the engine is switched off, the block valve is faulty.
Repair the defect as quickly as possible, contact a ***DIECI*** service centre.

(fig.66/D)
(Boom internal extension cylinder block valve)

D) levelling cylinders: (fig.67/D)

1. Position the vehicle on a perfectly horizontal surface.
2. Make sure that the parking brake is engaged and the transmission in neutral.
3. Lift the boom to about 15 cm from the ground and level the vehicle in a way that the frame is perfectly parallel to the surface (check the spirit level on the right dashboard).
4. Check that, without intervening on the levelling control, the vehicle keeps this position also after prolonged use.

In the event of offset of the cylinder rod, without operator intervention, the lock valve is faulty. Repair the defect as quickly as possible, contact a dieci service centre.

- ATTENTION:

Do not level the vehicle with boom lifted and extended.

(fig.67/D)
(Levelling cylinder lock valve)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

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REDUCER

Changing the oil
(fig.71/D)

- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

1. Stop the vehicle on a flat, level surface with differential oil still hot.
2. Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
3. Disconnect the battery by acting on the “battery isolator switch” see page D/16.
4. Place a container under the drain plugs to collect any oil which may come out during replacement.
5. Remove the drain plug (fig.71/D Pos.”G”) and the load/level plug (fig.71/D Pos.”F”) to carry out a complete drainage.
6. Allow the oil to completely drain out.
7. Replace the drain plugs and tighten them securely.
8. Pour an approved type of clean oil into the loading/level plug (fig.71/D Pos.”F”).
9. The level is correct when oil comes out from the loading/level plug (fig.71/D Pos.”F”).
10. Check for any leaks coming from the drain plugs.
11. Replace the load/level cap and tighten it securely.

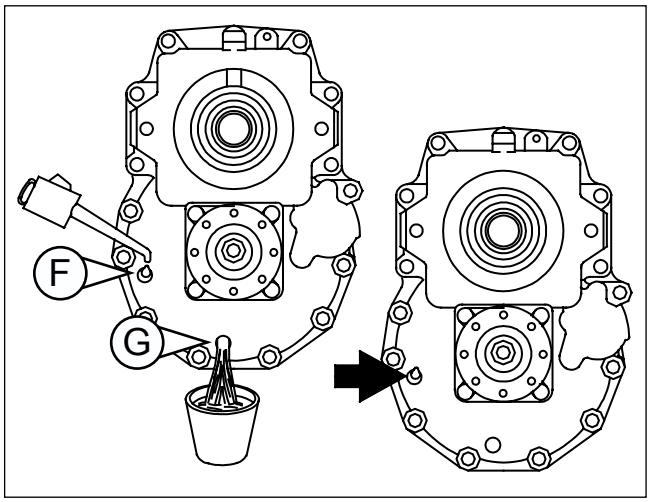
- ATTENTION:

The underside protection must be removed for this operation. Consult the “Underside removal” paragraph.

For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16.

- ATTENTION:

to change the oil, contact a *DIECI* after-sales centre.

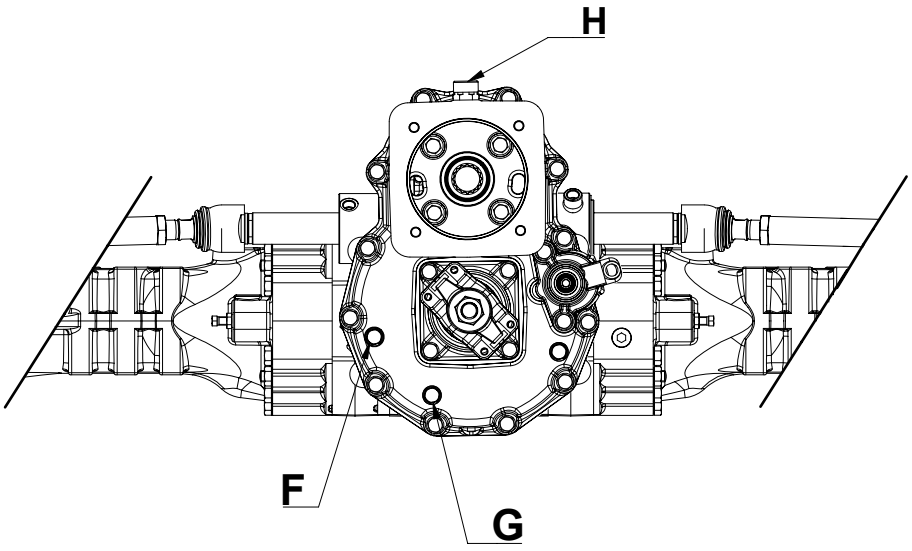


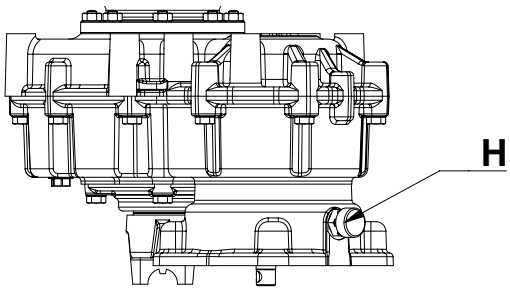
(fig.71/D)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

REDUCER

key	
E	**Oil level cap**
F	**Drain plug and oil level**
G	**Drain cap**
H	**Vent cap**
M	**Oil cap**





(fig.72/D)

FRONT/REAR DIFFERENTIAL AXLES

Changing the oil
(fig.75/D)

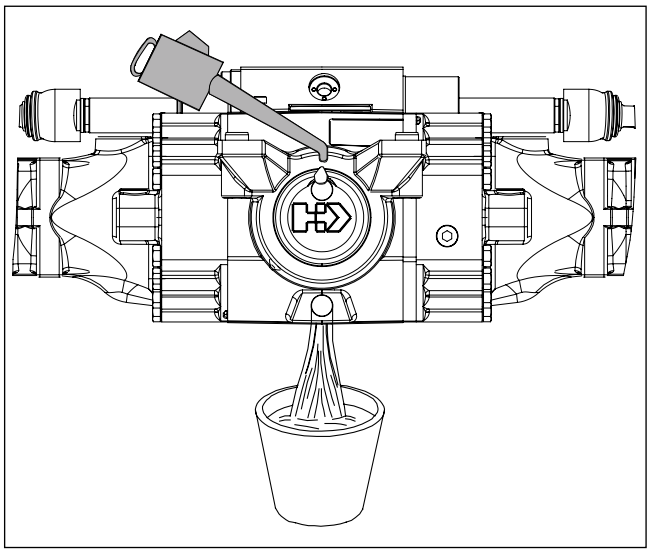
- ATTENTION -
IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

1. Stop the vehicle on a flat, level surface with differential oil still hot.
2. Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
3. Disconnect the battery by acting on the “battery isolator switch” see page D/16.
4. Place a container under the drain plugs to collect any oil which may come out during replacement.
5. Remove the drain plug (fig.76/D Pos.”G”) and the load/level plug (fig.76/D Pos.”F”) to carry out a complete drainage.
6. Allow the oil to completely drain out.
7. Replace the drain plugs and tighten them securely.
8. Pour an approved type of clean oil into the loading/level plug (fig.76/D Pos.”F”).
9. The level is correct when oil comes out from the loading/level plug (fig.76/D Pos.”F”).
10. Check for any leaks coming from the drain plugs.
11. Replace the load/level cap and tighten it securely.

For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16.

- ATTENTION:

to change the oil, contact a *DIECI* after-sales centre.



(fig.75/D)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

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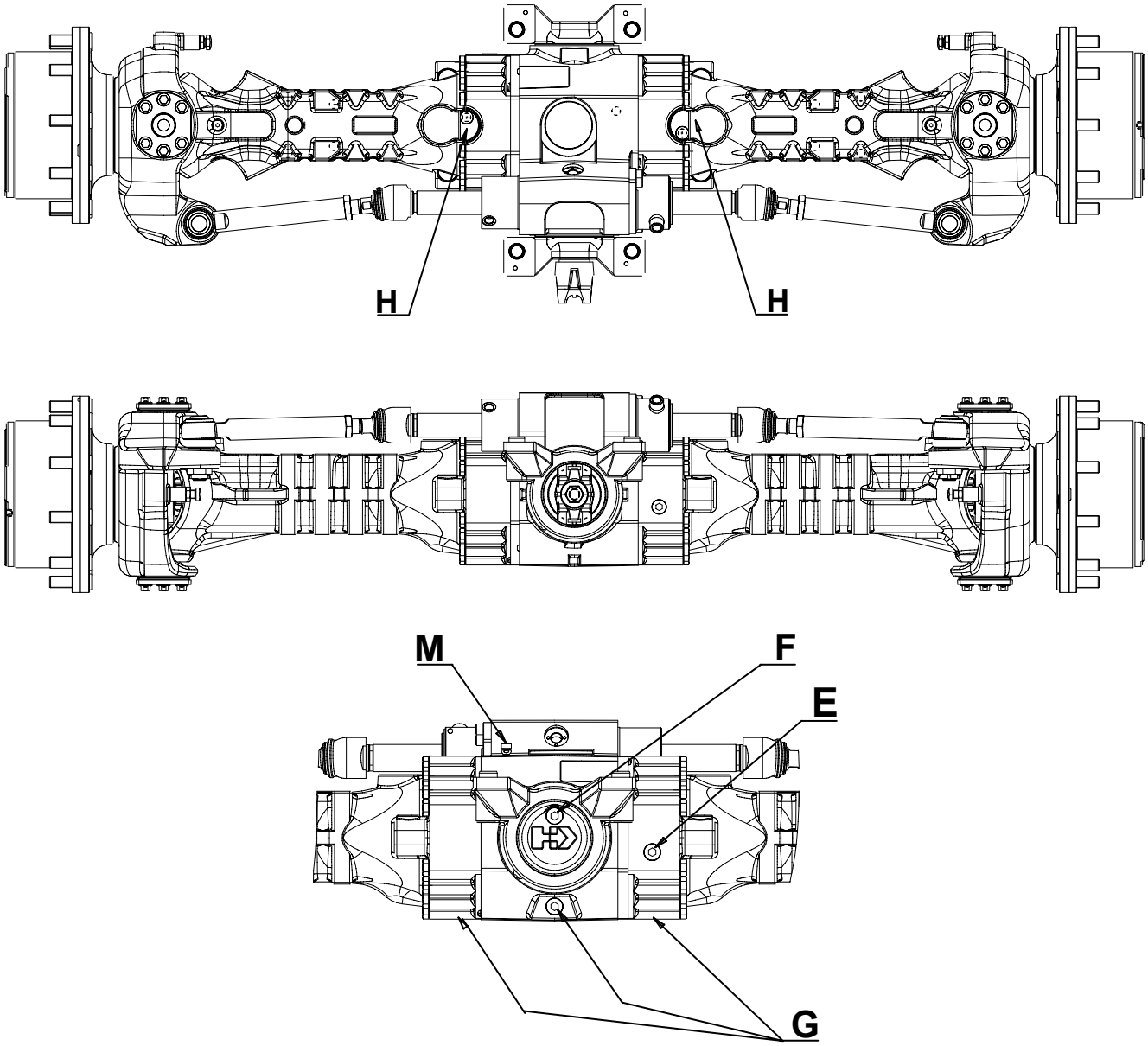
DIFFERENTIAL AXLE

key	
E	Oil level cap
F	Drain plug and oil level
G	Drain cap
H	Vent cap
M	Oil cap



(fig.76/D)

EPICYCICLIC REDUCTION GEAR

Changing the oil
(fig.81/D - fig.82/D - fig.83/D)

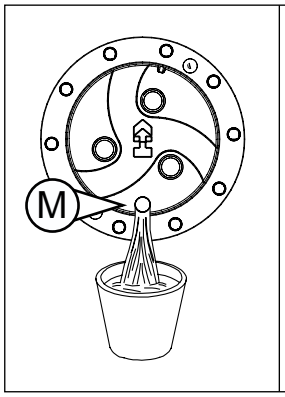
⚠ - ATTENTION - ⚠
IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

1. Stop the vehicle on a flat, level surface with differential oil still hot.
2. Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
3. Disconnect the battery by acting on the “battery isolator switch” see page D/16.
4. Place a container under the drain plugs to collect any oil which may come out during replacement.
5. Turn the wheel hub (fig.81/D Pos.”1”) so that the inlet (fig.82/D Pos.”M”) is moved to the lower position (fig.82/D) and then remove the oil cap.
6. Allow the oil to completely drain out.
7. Turn the wheel hub so that the inlet (fig.83/D Pos.”M”) is moved to the middle position (fig.83/D).
8. Fill the reduction gear to level via the inlet (fig.83/D).
9. The level is correct when oil comes out from the oil cap.
10. Replace the epicycloidal reduction gear cap and tighten it securely.
11. Repeat all the operations for each of the four reducer units.

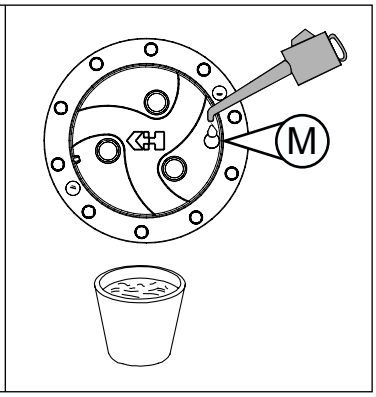
For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16.

⚠ - ATTENTION:
to change the oil, contact a ***DIECI*** after-sales centre.

(fig.81/D)



(fig.82/D)



(fig.83/D)

⚠ - CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

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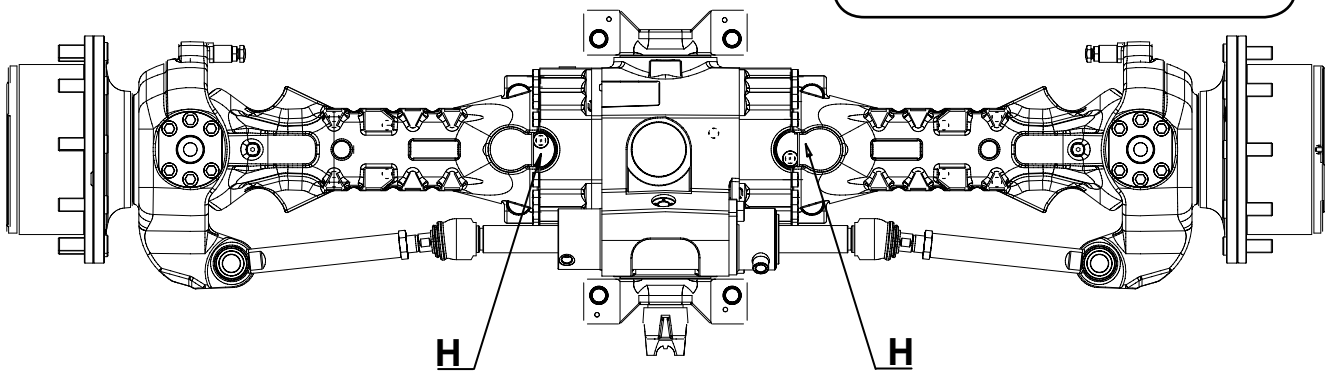
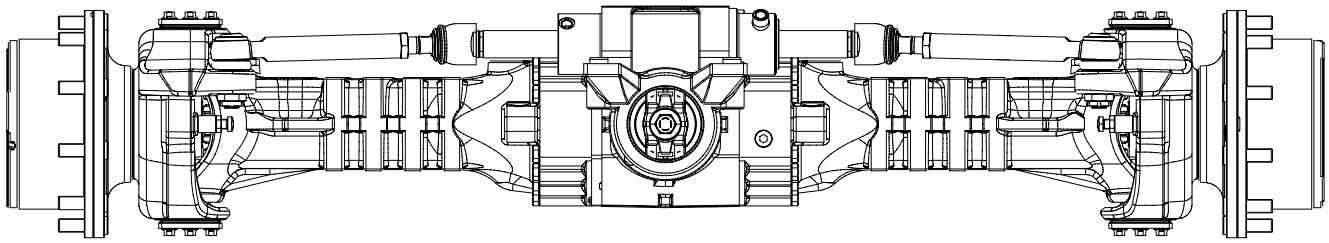
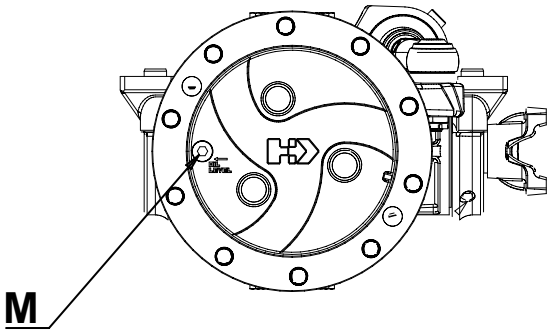
DIFFERENTIAL AXLE

key	
E	Oil level cap
F	Drain plug and oil level
G	Drain cap
H	Vent cap
M	Oil cap







(fig.84/D)

BOOM SLIDING BLOCKS

Lubricating
(fig.88/D)

⚠ - ATTENTION - ⚠

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

Boom sliding blocks must be kept lubricated to prevent deterioration as much as possible and keep movements smooth. Extend the boom completely and examine its surface.

In the event that the layer of grease is thin or presents impurities (sand, dust, shavings, etc.) proceed as follows:

- Stop the vehicle on a flat, level surface.
- Extend the boom completely in a horizontal position.
- Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
- Disconnect the battery by acting on the “battery isolator switch” see page D/16.
- With the boom completely extended horizontally, remove the layer of grease from the extension surfaces using a cloth.
- Use a brush to spread a layer of an approved type of grease on all sides of the telescopic boom.
- Move the boom several times to distribute the grease evenly.
- Remove any excess grease.

⚠ - ATTENTION - ⚠

During the visual check phase and spreading the grease, the vehicle must be off and the key removed from the cab to prevent accidental manoeuvres.

For specifications regarding safety refer to chapter “B”, paragraph “Carrying out maintenance in safety” page B/16.

⚠ - ATTENTION:

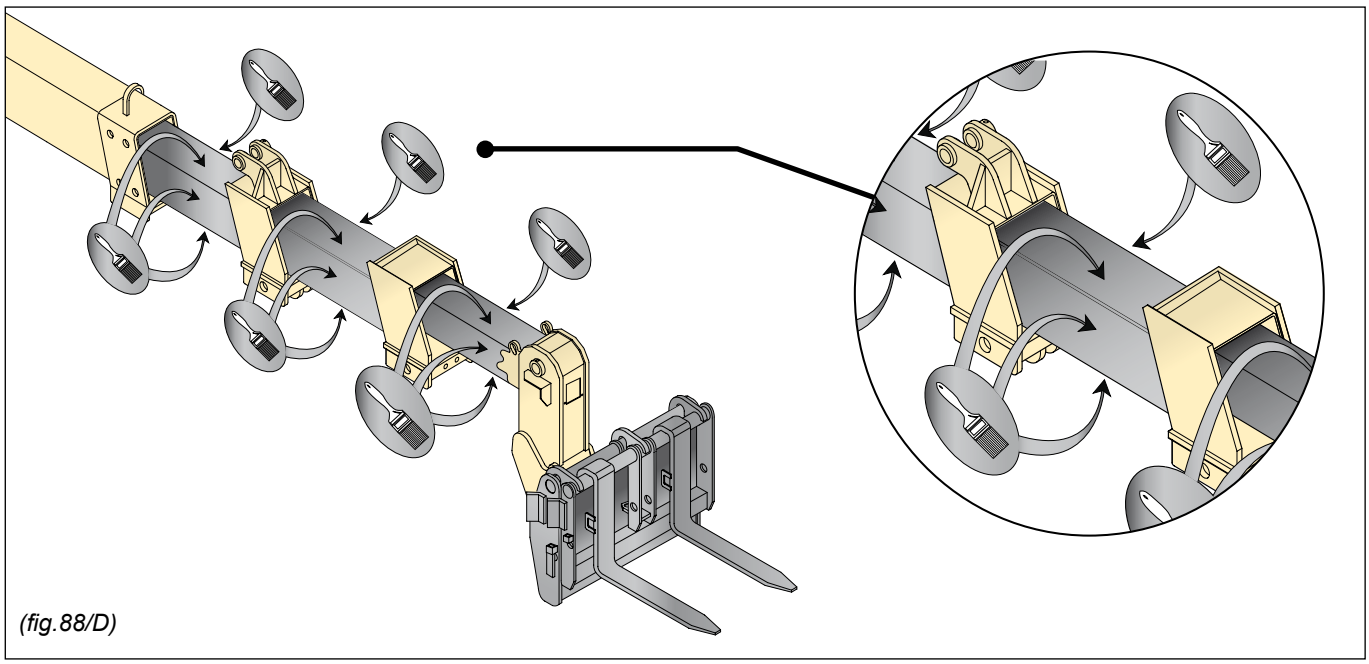
Should the vehicle be used in particularly severe conditions or very dusty environments lubricate more frequently.

⚠ - ATTENTION:

Only use lubricants indicated in dieci tables. Different lubricants may cause serious damage to sliding surfaces.

Sliding block wear

Consult the Summary Table at the start of the chapter for servicing intervals. Sliding block wear can cause oscillations and play between extensions causing a loss of accuracy in movements and the risk of load loss.
The more difficult the working conditions, the greater the wear and tear on the vehicle. Telescopic boom sliding block maintenance must be carried out by an authorised workshop.



(fig.88/D)

⚠ - CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

OUTER BOOM CHAINS
(fig.89/D)

Lubrication

Lubrication allows the operator to:

- Interpose liquid between contact surfaces to diminish wear and prevent seizure.
- Protect chains from rust.
- Reduce noise between the surfaces subject to collisions.

Lubrication must be carried out:

- Longitudinally, in an area where joints are only slightly strained to favour lubrication penetration.
- Crosswise, between the plates to facilitate oil penetration in joints.

Oil viscosity must be suitable to the surrounding temperature. Viscosity which is too low favours lubrication withdrawal and viscosity which is too high hinders lubricants from penetrating joints. For proper viscosity, refer to the table at the side (fig.90/D).

- ATTENTION:

In the event of special applications or use in adverse conditions, consult a ***DIECI*** service centre.

- PROHIBITED -

IT IS PROHIBITED
to lubricate the chains using grease.

Checking for Wear

At prescribed intervals, verify:

- The installation geometry.
- The condition of the chain in order to analyse traces of friction that may indicate incorrect installation geometry. Wear on the side plate profile due to contact with pulleys and guiding systems. Wear on the sides of the external plates and on the pin heads due to contact with pulley flanges or with any guiding devices.
- Wear on chain joints both due to direct measurement of its length with measurement instrument or a control scale, and visually.
- Wear of Fleyer raising chain plates.

- ATTENTION -

The chains must be replaced when wear due to lengthening exceeds 2%. When the chain is replaced IT IS MANDATORY also to replace the respective rollers.

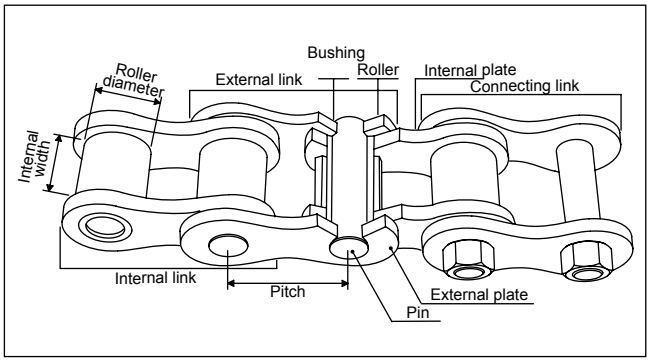
(fig.89/D)

- ATTENTION -

IT IS MANDATORY TO USE
INDIVIDUAL PROTECTION DEVICES (I.P.D.)
to perform maintenance/control operations.

Temperature (C°)	Recommended viscosity ISO VG (Cst)
- 15 < T< 0	Between 15 and 32
0 < T< 50	Between 46 and 150
50 < T< 80	Between 220 and 320

(fig.90/D) Chain oil viscosity table



(fig.91/D) Components of a standard chain

Determining wear due to extension

- Verify the type of chain installed, indicated on its external plate. If it cannot be read, contact a ***DIECI*** service centre.
- Identify the pitch of the chain on the table (fig.92/D). (e.g. Fleyer AL8/BL8 Chain Pitch 1”/25.40mm) and multiply it by 10.
- Measure 10 pitches of the chain to be verified (fig.93/D).
- If the measurement exceeds 2% of the pitch indicated in the table multiplied by ten, the chain should be considered worn and must be replaced.

2% of the measurement = [Measurement: 100] x 2

- ATTENTION:

Measurements must be taken at several points as wearing may not be uniform. The chain must also be tight. Measurements can be carried out with a bore or a ruler divided into millimetres (fig.94/D).

Check, cleaning, lubrication

- Stop the vehicle on a flat, level surface.
- Position the vehicle on outrigger feet (if present).
- Extend the telescopic boom completely in a horizontal position.
- Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
- Clean the chains to eliminate surface impurities with a clean cloth that will not leave residue.
- Forcefully brush chains to remove impurities, using a hard nylon brush and clean fuel. Then blow with compressed air.
- Carefully examine the chains as described in the “checking for wear” paragraph .
- Lightly lubricate the chains with a brush soaked in oil (see paragraph entitled “lubrication”).
- Remove excess oil from the entire surface of the chains using a clean cloth.
- Move the boom several times to distribute the oil evenly.

- ATTENTION:

In case of chain replacement, contact a ***DIECI*** service centre.

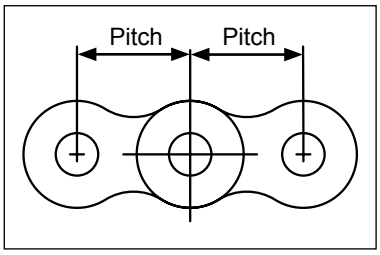
- ATTENTION -

Chains can be made fragile by hydrogen.

Operating in acidic environments IS STRICTLY PROHIBITED. Operate for as little time as possible when in oxidative or corrosive environments.

AL4	AL5	AL6	AL8	AL10	AL12	AL14	AL16	Fleyer chains
BL4	BL5	BL6	BL8	BL10	BL12	BL14	BL16	Fleyer chains
1/2”	5/8”	3/4”	1”	1 1/4”	1 1/2”	1 3/4”	2”	Inch pitch
12,70	15,87	19,05	25,40	31,75	38,10	44,45	50,80	Mm pitch

(fig.92/D)



(fig.93/D)

- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

(fig.94/D)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

GREASING

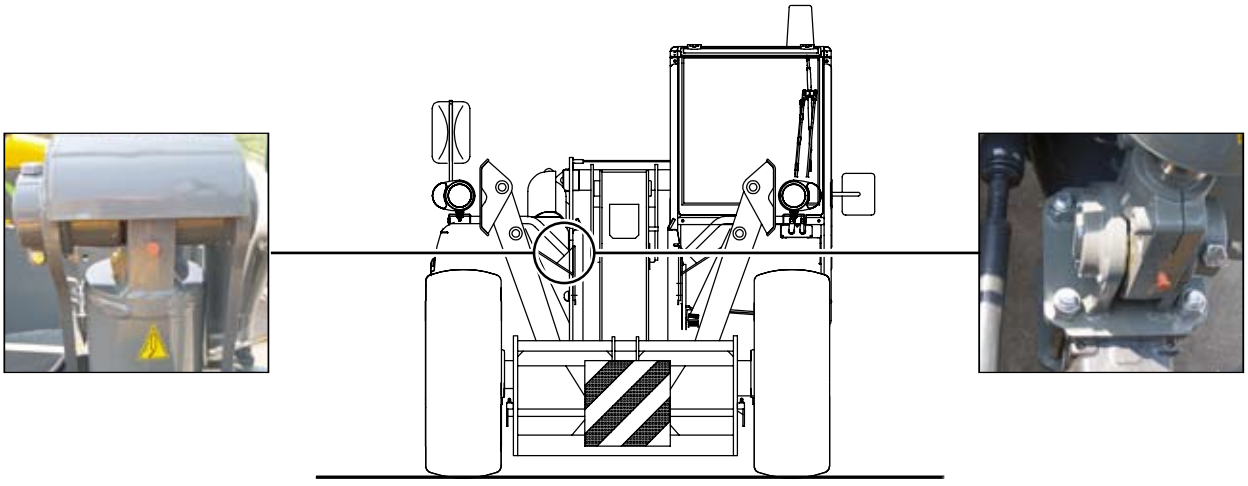
transverse levelling device

- ATTENTION -

**IS MANDATORY TO USE THE I.P.D.
TO CARRY OUT THE MAINTENANCE/CONTROL
OPERATIONS.**

**For the safety specifications, refer to chapter “B”,
“Carrying out maintenance in safety ” paragraph page B/16.**

mod. Agri Max - Agri Power - Agri Star



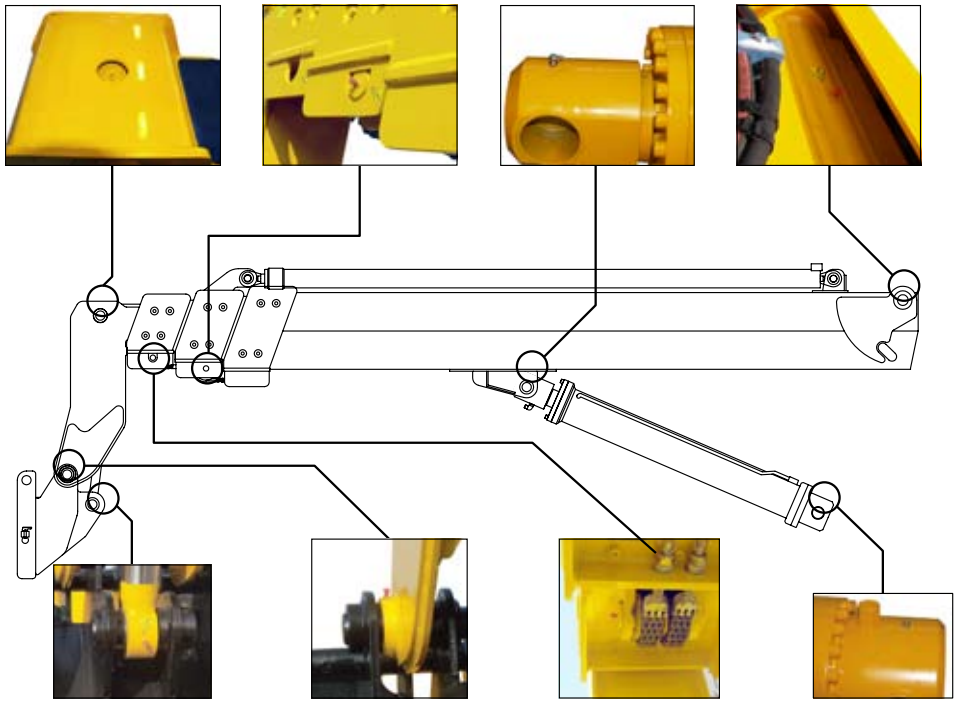
GREASING NIPPLES

One/two/three extension booms

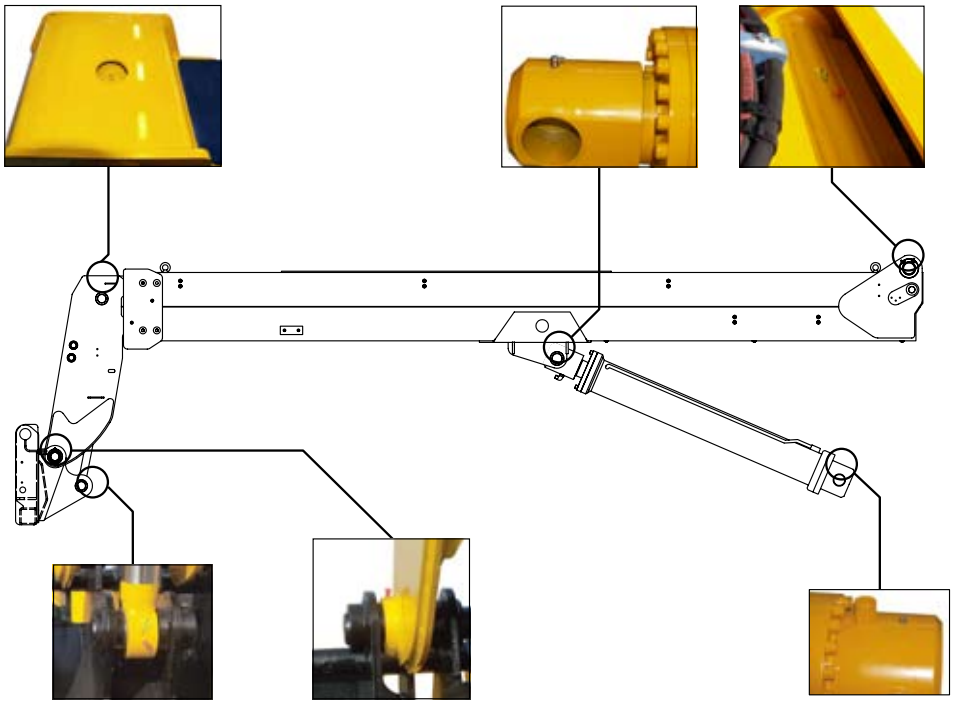
The references of the greasing nipples of the booms with two extensions are the same as the booms with three extensions.

For the safety specifications, refer to chapter "B", "Carrying out maintenance in safety " paragraph page B/16.

- ATTENTION -
IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.



(fig.96/D)



(fig.97/D)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

GREASING

Transmission shafts and differential axles

- ATTENTION:

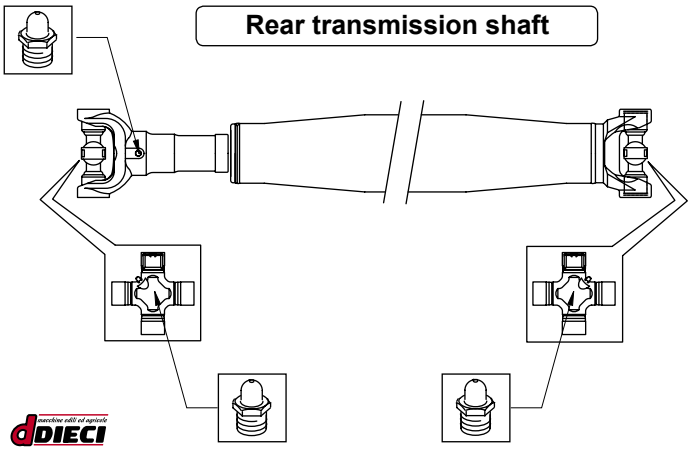
The underside protection must be removed for this operation. Consult the “Underside removal” paragraph.

For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16.

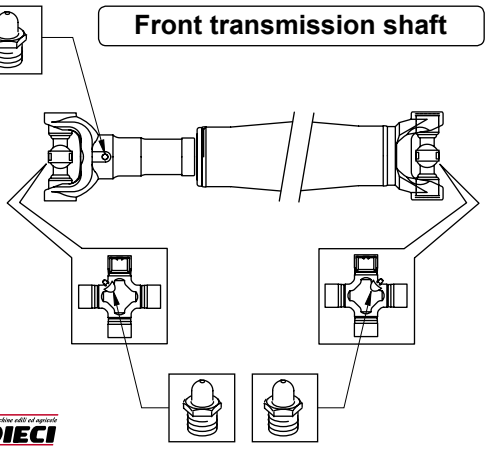
- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

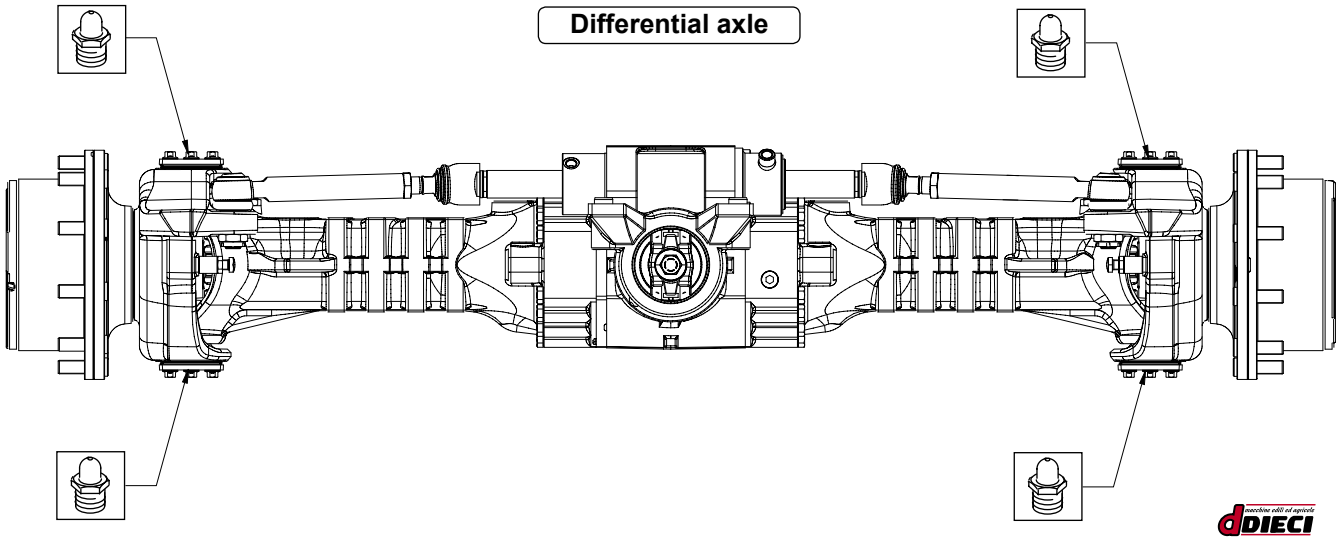
Rear transmission shaft



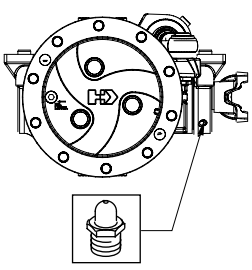
Front transmission shaft



Differential axle



Epicycloidal reduction gear



(fig.98/D)

FUSES

main control unit
(fig.100/D Pos.”1”)

The general electric circuit is protected by fuses located on the general circuit board (fig.100/D Pos.”1”).
Access the electronic card by removing the left plastic under the dashboard, removing its screws.
In the event of an electrical malfunction, fuse conditions must be verified as the first troubleshooting operation. Fuses must be removed with special pliers.

To replace a fuse, remove it from its housing using special pliers and replace it with another fuse of equal class, quality and amperage.

- ATTENTION -
IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

For the safety specifications, refer to chapter “B”, “Carrying out maintenance in safety ” paragraph page B/16.

- ATTENTION:

Before removing the plastic from under the dashboard:

- Stop the vehicle on a flat, level surface.
- Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
- Disconnect the battery by acting on the “battery isolator switch” see page D/16 cut off electrical power to the vehicle using the battery isolator.

- ATTENTION:

Do not attempt to repair fuses.

(fig.100/D)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

engine control unit
(fig.101/D Pos.”1”)

Engine electrical circuits and connected components are protected by a fuse control unit located within the engine compartment (fig.101/D Pos.”1”). Remove the box cover to access the fuses. In the event of an electrical malfunction fuse conditions must be verified as the first troubleshooting operation.

To replace a fuse, remove it from its housing using special pliers and replace it with another fuse of equal class, quality and amperage. All other operations must be carried out by qualified, authorised personnel only.

- ATTENTION -

IT IS MANDATORY TO USE
INDIVIDUAL PROTECTION DEVICES (I.P.D.)
to perform maintenance/control operations.

For the safety specifications, refer to chapter “B”,“Carrying out maintenance in safety ” paragraph page B/16.

- ATTENTION:

Before accessing the engine compartment:

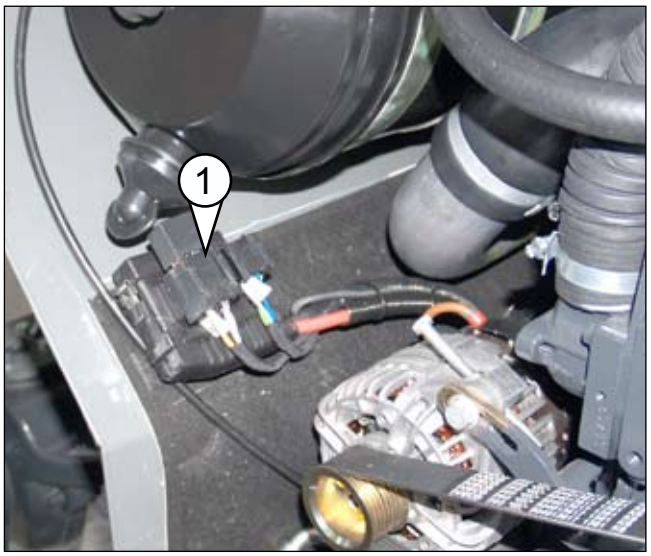
- Stop the vehicle on a flat, level surface.
- Switch off the engine and remove the ignition key, hang up a sign in the cab that reads “maintenance work under way”.
- Disconnect the battery by acting on the “battery isolator switch” see page D/16 cut off electrical power to the vehicle using the battery isolator.

- ATTENTION:

Do not attempt to repair fuses.

- ATTENTION -

The main fuse of the vehicle
is located onside the engine control unit.



(fig.101/D)

LIGHTING

Vehicle lighting must always be efficient and functioning properly. Proper lighting function must be checked daily. If the lighting body is damaged in any way, replace the damaged part immediately. Burnt light bulbs should be replaced immediately. **For the safety specifications, refer to chapter "B", "Carrying out maintenance in safety " paragraph page B/16.**

FRONT LIGHT
(fig.105/D)

The front light is composed of a direction indicator, a position light, dipped light/headlight.

To access the bulbs:

- Switch off the vehicle and use the battery isolator to cut-out electrical power.
- Remove the power connection of the rear light.
- Remove the front part of the light by loosening its screws located in the rear cap.

To close the light back up, carry out these steps in the opposite order, being careful to position the seal correctly.

Replacing direction indicator bulbs
(fig.106/D Pos."1") (21w)

- Press the upper part of the bulb.
- Turn and hold down the bulb to free it from the lock.

Carry out the same steps to insert the new bulb.

Replacing a position light bulb
(fig.107/D Pos."1") (4w)

- Take hold of the rear part where the electrical connections are located (fig.107/D Pos."2").
- Turn and pull the rear part towards you.
- Remove the support and press the upper part of the bulb.
- Turn and hold down the bulb to free it from the lock.

Carry out the same steps to insert the new bulb. Reinsert the support inside its housing.

Replacing a dipped light/headlight bulb
(fig.108/D Pos."1")(60/55w H4)

- Remove the electrical connector by pulling it towards you.
- Raise the locking tabs (fig.108/D Pos."2"), moving them laterally to free the bulb.
- Replace the bulb and proceed in the opposite order to lock and reconnect it. Respect bulb closing mechanisms (fig.85/D Pos."3") for proper insertion.

- ATTENTION -

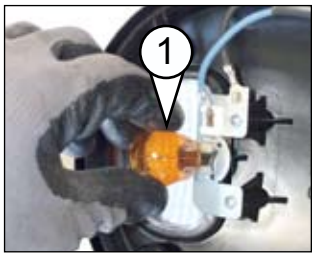
The bulbs are very fragile. Handle with care

The dipped beam bulbs must not be handled with bare hands.

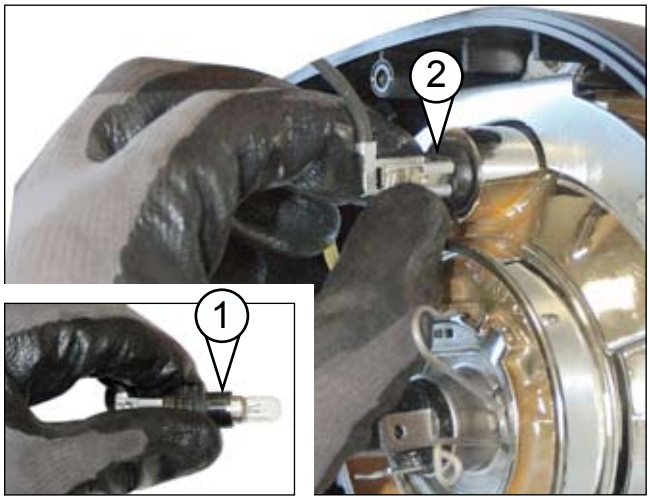
- ATTENTION -

IT IS MANDATORY TO USE INDIVIDUAL PROTECTION DEVICES (I.P.D.) to perform maintenance/control operations.

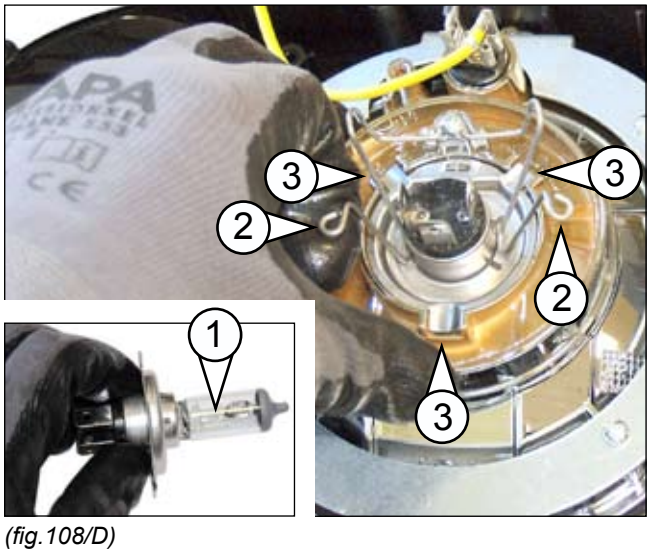
(fig.105/D)



(fig.106/D)



(fig.107/D)



(fig.108/D)

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

REAR LIGHT
(fig.109/D)

The rear light is composed of a reverse light (21W) (fig.109/D Pos.”1”), rear red light (5W) (fig.109/D Pos.”2”), a stop light (21W) (fig.109/D Pos.”3”), and a direction indicator (21W). (fig.109/D Pos.”4”), rear fog (21W) (fig.109/D Pos.”5”).

To access the bulbs:

- Switch off the vehicle and use the battery isolator to cut-out electrical power.
- Remove the power connection of the rear light.
- Remove the front part of the light by loosening its screws located on the cap.

- ATTENTION:

To close the light back up, carry out these steps in the opposite order, being careful to position the seal correctly.

Replacing the rear light bulb.

- Press the upper part of the bulb.
- Turn and hold down the bulb to free it from the lock.

Carry out the same steps in the opposite order to insert a new bulb.

(fig.109/D)

WORKING LIGHT
(fig.110/D)

Replacing bulbs
(Fig.112/D Pos.”1”) (special bulb)

- Switch off the vehicle and use the battery isolator to cut-out electrical power.
- Remove the power connection of the rear light (fig.111/D Pos.”1”).
- Press the connector grip on the light (fig. 111/D Pos.”2”).
- Turn and hold the grip down, to release it.

Carry out the same steps in the opposite order to insert a new bulb.

(fig.110/D)

(fig.111/D)

(fig.112/D)

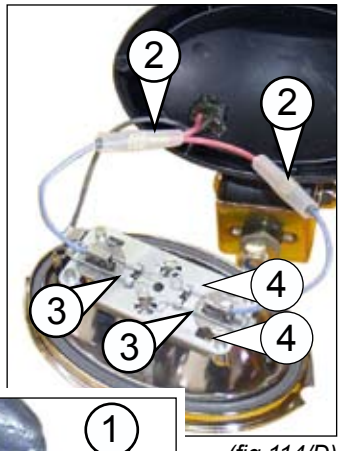
DUAL REFLECTOR WORKING LIGHT
(fig.113/D)

Replacing bulbs
(fig.114/D Pos.”1”) (Type 21w H3)

- Switch off the vehicle and use the battery isolator to cut-out electrical power.
- Remove the screws on the front part of the light.
- Remove the power supply connectors from the bulbs (fig.114/D Pos.”2”).
- Move the locking tabs, bringing them towards the inside to release them (fig.114/D Pos.”3”).

Carry out the same steps in the opposite order to insert a new bulb. Treat the bulb closing mechanisms with care (fig.114/D Pos.”4”) for proper insertion.

(fig.113/D)



(fig.114/D)

PRELOAD AND TIGHTENING TORQUE TABLE FOR CLASS 1 NUTS AND BOLTS

	friction factor	fine pitch nut and bolt classes											
		4.8		5.8		6.8		8.8		10.9		12.9	
		preload N	tightening torque Nm	preload N	tightening torque Nm	preload N	tightening torque Nm	preload N	tightening torque Nm	preload N	tightening torque Nm	preload N	tightening torque Nm
M8	**0.10**	9798.1	**10.87**	12247.6	**13.59**	14697.1	**16.31**	19596.1	**21.75**	27557.1	**30.58**	33068.5	**36.70**
	0.14	9079.5	**13.53**	11349.4	**16.91**	13619.3	**20.29**	18159.1	**27.05**	25536.2	**38.04**	30643.4	**45.65**
M10	**0.10**	15296.9	**21.13**	19121.1	**26.41**	22945.3	**31.69**	30593.8	**42.25**	43022.5	**59.42**	51627.0	**71.30**
	0.14	14175.0	**26.27**	17718.8	**32.84**	21262.6	**39.41**	28350.1	**52.55**	39867.3	**73.89**	47840.8	**88.67**
M12	**0.10**	22020.7	**35.83**	27525.9	**44.79**	33031.0	**53.75**	44041.4	**71.67**	61933.2	**100.78**	74319.8	**120.94**
	0.14	20405.8	**44.53**	25507.2	**55.66**	30608.7	**66.79**	40811.6	**89.06**	57391.3	**125.24**	68869.5	**150.29**
M14	**0.10**	31610.0	**59.04**	39512.5	**73.80**	47415.0	**88.57**	63220.0	**118.09**	88903.1	**166.06**	106683.7	**199.27**
	0.14	29345.9	**73.92**	36682.4	**92.40**	44018.9	**110.89**	58691.9	**147.85**	82535.4	**207.91**	99042.5	**249.49**
M16	**0.10**	42581.3	**89.78**	53226.6	**112.23**	63871.9	**134.67**	85162.5	**179.56**	119759.8	**252.51**	143711.8	**303.02**
	0.14	39587.8	**113.06**	49484.7	**141.32**	59381.6	**169.59**	79175.5	**226.12**	111340.6	**317.98**	133608.7	**381.57**
M18	**0.10**	51457.2	**124.03**	64321.5	**155.03**	77185.8	**186.04**	102914.4	**248.06**	144723.3	**348.83**	173668.0	**418.59**
	0.14	47751.7	**155.02**	59689.6	**193.78**	71627.5	**232.53**	95503.3	**310.05**	134301.6	**436.00**	161161.9	**523.20**
M20	**0.10**	65534.1	**173.72**	81917.7	**217.16**	98301.2	**260.59**	131068.3	**347.45**	184314.8	**488.60**	221177.8	**586.32**
	0.14	60886.2	**218.17**	76107.8	**272.71**	91329.3	**327.26**	121772.4	**436.34**	171242.5	**613.61**	205491.0	**736.33**
M22	**0.10**	81220.8	**236.88**	101526.0	**296.10**	121831.2	**355.32**	162441.5	**473.76**	228433.4	**666.23**	274120.1	**799.48**
	0.14	75533.9	**298.75**	94417.4	**373.43**	113300.9	**448.12**	151067.8	**597.49**	212439.1	**840.22**	254927.0	**1008.27**
M24	**0.10**	98515.6	**308.56**	123144.5	**385.70**	147773.4	**462.84**	197031.1	**617.12**	277075.0	**867.83**	332490.0	**1041.40**
	0.14	91693.3	**390.33**	114616.6	**487.92**	137539.9	**585.50**	183386.5	**780.67**	257887.3	**1097.82**	309464.8	**1317.38**

⚠ - CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

PRELOAD AND TIGHTENING TORQUE TABLE FOR CLASS 2 NUTS AND BOLTS

	friction factor	large pitch nut and bolt classes											
		4.8		5.8		6.8		8.8		10.9		12.9	
		preload N	tightening torque Nm	preload N	tightening torque Nm	preload N	tightening torque Nm	preload N	tightening torque Nm	preload N	tightening torque Nm	preload N	tightening torque Nm
M6	0.10	4874.7	**4.24**	6093.4	**5.30**	7312.1	**6.35**	9749.4	**8.47**	13710.1	**11.92**	16452.2	**14.30**
	0.14	4499.1	**5.19**	5623.9	**6.48**	6748.6	**7.78**	8998.2	**10.37**	12653.7	**14.59**	15184.4	**17.51**
M7	0.10	7134.5	**6.97**	8918.2	**8.71**	10701.8	**10.45**	14269.1	**13.94**	20065.9	**19.60**	24079.1	**23.52**
	0.14	6599.6	**8.60**	8249.5	**10.76**	9899.4	**12.90**	13199.2	**17.21**	18561.4	**24.20**	22273.6	**29.04**
M8	0.10	8947.1	**10.20**	11183.9	**12.75**	13420.7	**15.30**	17894.2	**20.41**	25163.7	**28.70**	30196.5	**34.44**
	0.14	8265.6	**12.54**	10332.0	**15.67**	12398.4	**18.80**	16531.2	**25.07**	23247.0	**35.26**	27896.5	**42.31**
M10	0.10	14244.5	**20.11**	17805.6	**25.14**	21366.8	**30.16**	28489.0	**40.22**	40062.7	**56.56**	48075.3	**67.87**
	0.14	13167.4	**24.76**	16459.2	**30.95**	19751.1	**31.14**	26334.8	**49.52**	37033.3	**69.64**	44439.9	**83.56**
M12	0.10	20766.6	**34.43**	25958.3	**43.03**	31149.9	**51.64**	41533.2	**68.86**	58406.1	**96.83**	70087.3	**116.20**
	0.14	19204.0	**42.42**	24005.0	**53.03**	28806.0	**63.63**	38408.0	**84.84**	54011.2	**119.31**	64813.5	**143.17**
M14	0.10	28389.9	**54.77**	35487.4	**68.46**	42584.9	**82.15**	56779.8	**109.53**	79846.6	**154.03**	95816.0	**184.84**
	0.14	26261.2	**67.56**	32826.5	**84.45**	39391.8	**101.34**	52522.4	**135.13**	73859.6	**190.02**	88631.5	**228.03**
M16	0.10	39242.1	**85.14**	49052.7	**106.43**	58863.2	**127.72**	78484.3	**170.29**	110368.5	**239.47**	132442.2	**287.36**
	0.14	36364.2	**105.80**	45455.3	**132.26**	54546.3	**158.71**	72728.5	**211.61**	102274.4	**297.58**	122729.3	**357.09**
M18	0.10	47533.0	**117.48**	59416.3	**146.85**	71299.6	**176.22**	95066.1	**234.96**	133686.7	**330.41**	160424.1	**396.49**
	0.14	43986.1	**145.16**	54982.7	**181.45**	65979.2	**217.74**	87972.3	**290.32**	123711.0	**402.26**	148453.2	**489.92**
M20	0.10	61238.0	**166.08**	76547.5	**207.61**	91857.0	**249.13**	122476.0	**332.17**	172231.9	**467.11**	206678.2	**560.54**
	0.14	56747.1	**206.39**	70933.9	**257.98**	85120.6	**309.58**	113494.2	**412.78**	159601.2	**580.47**	191521.5	**696.56**
M22	0.10	76305.2	**227.22**	95381.5	**284.02**	114457.8	**340.82**	152610.4	**454.43**	214608.3	**639.05**	257530.0	**766.85**
	0.14	70791.9	**283.79**	88489.8	**352.74**	106187.8	**425.69**	141583.7	**567.58**	199102.1	**798.16**	238922.5	**957.80**
M24	0.10	88232.4	**287.16**	110290.5	**358.94**	132348.6	**430.73**	176464.9	**574.31**	248153.7	**807.63**	297784.4	**969.15**
	0.14	81761.8	**356.84**	102202.2	**446.05**	122642.7	**535.26**	163523.6	**713.68**	229955.1	**1003.61**	275946.1	**1204.33**

TORQUE TABLE FOR HYDRAULIC FITTINGS

60° oval insert - BSP thread									
THREAD	1/18-28	1/4-19	3/8-19	1/2-14	5/8-14	3/4-14	1”-11	1”1/4-11	1”1/2-11
N.m	12-14	14-16	25-28	45-60	55-70	90-110	120-140	170-190	200-245

60° oval insert - METRIC thread									
THREAD	10x1	12x1,5	14x1,5	16x1,5	18x1,5	22x1,5	26x1,5	28x1,5	30x1,5
N.m	12-14	13-15	15-18	25-28	27-30	50-60	60-75	80-100	110-130

DIN FITTINGS SERIES / RANGE “L”									
THREAD	12x1,5	14x1,5	16x1,5	18x1,5	22x1,5	26x1,5	30x2	36x1,5	45x1,5	52x1,5
N.m	13-15	15-18	25-28	27-30	50-60	30-75	85-105	120-140	170-190	190-230

DIN FITTINGS SERIES / RANGE “S”									
THREAD	14x1,5	16x1,5	18x1,5	20x1,5	22x1,5	24x1,5	30x2	36x2	42x2	52x2
N.m	15-18	25-28	27-30	43-54	50-62	60-75	90-110	125-145	170-190	200-245

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

TROUBLESHOOTING

- ATTENTION:

Troubleshooting interventions should only be carried out by qualified personnel.

Do not carry out troubleshooting interventions if the “User Instructions” and “Safety Regulations” of the vehicle have not been read and understood.

This symbol means that the problem can NOT be resolved without the assistance of an authorised **DIECI *Service*** workshop.

GROUP	PROBLEM	PROBABLE CAUSE	SOLUTION
ENGINE	The vehicle will not start	Direction lever is engaged.	Put the lever in neutral
		No fuel	Fill up the tank
		Battery dead	Recharge the battery or replace it
		Burnt out fuse	Change the fuse
		Others	Consult the engine Use and Maintenance book

GROUP	PROBLEM	PROBABLE CAUSE	SOLUTION
DRIVE HYDRAULIC SYSTEM	The vehicle does move in any direction.	The sensor incorporated in the seat does not detect the driver’s presence	Sit down correctly
		The forward/reverse lever is not engaged (indicator off)	Insert the lever in the desired position
		Slow/fast speed switch (indicator light off)	Press the switch
		Rear axle blocked (optional)	Release the axle.
	The vehicle loses speed	Hydraulic oil suction filter blocked.	Remove the oil filter and replace it
		Hydrostatic transmission failure	Repair or replace the transmission
		Inching pedal anomaly	Check the pedal return spring Check distributor position

Cont. from page D/56

TROUBLESHOOTING

GROUP	PROBLEM	PROBABLE CAUSE	SOLUTION
DRIVE HYDRAULIC SYSTEM	The vehicle does move in any direction.	Level of hydraulic oil insufficient	Check the level of hydraulic oil
		Parking brake on	Disengage the brake
		Hydrostatic transmission failure	Repair or replace the transmission
		Electric circuit damaged	Repair the circuit
		The slide valve under the car has been closed (vehicle tow)	Open the slide valve

GROUP	PROBLEM	PROBABLE CAUSE	SOLUTION
BRAKES	The vehicle does not brake	There is no oil in the brake oil tank	Top-up tank or bleed system
		Fluid leaking from the circuit	Check for leaks
		Brake pads worn	Change the brake pads
		Brake pump damaged	Repair or replace
		Unsuitable fluid in the circuit or in the differential sump	Check oil comparison table

GROUP	PROBLEM	PROBABLE CAUSE	SOLUTION
STEERING	The vehicle moves transversally The wheels are not aligned	The wheels are not aligned correctly	Proceed with realignment.
		Steering selection error	Reposition the lever in different steering mode
		Control distributor failure	Repair or replace distributor
		The steering wheel hydraulic cylinders leak oil.	Replace the gaskets

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

TROUBLESHOOTING

GROUP	PROBLEM	PROBABLE CAUSE	SOLUTION
TELESCOPIC BOOM	The vehicle will not lift load	The safety systems are activated	See chapter “Getting to know the vehicle”
		Electrical system failure	Check fuses and the electrical system
		Hydraulic oil level in tank insufficient	Top up
		Relevant hydraulic pump failure	Repair or replace pump
		Distributor calibrated too low	Check and retract the distributor
		Internal leakage of raising cylinders.	Replace the gaskets
	The boom does not extend	The safety systems are activated (Indicator light and acoustic alarm functioning)	See chapter “Getting to know the vehicle”
	The boom cannot be lowered	The safety systems are activated (Indicator light and acoustic alarm functioning)	See chapter “Getting to know the vehicle”

HOW TO COMPLETE THE SERVICE REGISTER

- The **"SERVICE REGISTER"** must be completed in compliance with the Essential Safety Requirement 4.4.2.b of Enclosure I of Machine Directive **EC/98/37**, to prove that all machine inspection and service activities concerning safety have been carried out correctly.
- Together with every activity concerning the life and use of the machine (replacement of parts, services, malfunctions, etc.) the Service Register must also include information regarding all the quarterly and yearly inspections provided for by law, including those indicated in the "Maintenance" section and "Attachments" chapter of this Manual.
- The name of the service engineer and the date the job was carried must also be clearly indicated.
- **You are recommended to complete, up-date and keep this Service Register with care throughout the entire life of the machine.**
- The following pages have been left free to ease creation of your own Service Register.

OBLIGATIONS AND HOW TO FORWARD STATEMENTS TO I.S.P.E.S.L. (SUPREME INSTITUTE FOR ACCIDENT PREVENTION AND SAFETY IN THE WORKPLACE)

- The Italian Ministerial Decree dated 12/09/1959, under Title II – Article 7, states that the employers and users of **engine-driven lifting equipment having capacities greater than 200 kg** and **personnel platforms**, are obliged to inform the competent authority (currently **I.S.P.E.S.L.** - the **Supreme Institute For Accident Prevention And Safety In The Workplace** in Italy) when the machine is commissioned, specifying the place of installation of the machine so that this authority may make an **initial inspection**.
- This fulfilment is confirmed by Article 11 – section 3 of **Italian Presidential Decree 459** dated 24/07/1996, a national law that transposes **Machine Directive EC/98/37**.
- The statement to the Supreme Institute for Accident Prevention and Safety in the Workplace is made by enclosing a **copy** of the **EC Statement of Conformity** of the machine, with reference to **Enclosure IIA** of Italian PRESIDENTIAL DECREE 459/96 – Machine Directive EC/98/37.
- The original statements (EC Statement of Conformity – Enclosure IIA or Manufacturer's Statement –Enclosure IIB) must be kept by the client.
- The statement shall be forwarded to the Supreme Institute for Accident Prevention and Safety in the Workplace by registered post with advice of receipt.
- The Supreme Institute For Accident Prevention And Safety In The Workplace will then inform the local surveillance authority (A.S.L. in Italy) that the machine is in use; this authority is then in charge of the **subsequent yearly inspections**.

SCHEDULED INSPECTIONS AND REGISTRATION METHOD

- The employer or user of the machine must ensure the machine is inspected regularly pursuant to the law (Italian Presidential Decree 547 dated 27/4/55; Italian Ministerial Decree 12/9/59 and Italian Decree Law 626 dated 19/9/94).
- He or she must also comply with the maintenance and inspection schedule described in this Use and Maintenance Manual.
- Inspections and scheduled tests, together with maintenance work must be carried out by especially employed experts, or by a workshop authorised by the manufacturer, ***DIECI S.r.l.***
- The employer/user of the machine must record the results of the tests and inspections in the Service Register, or ask specifically trained personnel to record them.
- The scheduled tests and inspections that must be recorded in the "Service Register" are:
  - **a)** **Quarterly inspections** that involve the operation and/or efficiency of ropes/chains according to **Article 179** of **Italian Presidential Decree 547** dated **27/4/55**.
  - **b)** **Yearly inspections** that involve the operation and the preservation of the machine in terms of safety (yearly tests, corrosion inspections, calibration tests, etc.) according to **Article 194** of **Italian Presidential Decree 547** dated **27/4/55**.
- The law foresees administrative fines for those who fail to carry out quarterly and yearly inspections.
- The Service Register, in which the inspections are recorded, must be shown on request to the inspectors in charge of ensuring that the current laws are observed.
- After the yearly inspection has been carried out, the A.S.L. inspector issues an acceptance report or prescribes the action necessary to fulfil legal requirements. The user is obliged to store the inspection report with the Service Register.
- If the local surveillance authority (A.S.L. in Italy) should fail to make the yearly inspection, you are in any event recommended to have the yearly inspection carried out by a qualified engineer and record the results in the Service Register.
- The evaluations of the inspections must be registered in the reserved pages below, indicating the outcome of the inspection, the date, the signature and any comments by the inspector.
- If not enough pages have been reserved within this manual to contain all the notes concerning the life of the machine, use additional sheets of paper, remembering to complete them in the same manner.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

MACHINE DETAILS

Manufacturer: ***Dieci S.r.l.***

Model: ..... serial number ..... Year .....

Attachment..... serial number ..... Year .....

Max. capacity [kg]: .....

Attachment ..... serial number ..... Year .....

Max. capacity [kg]: .....

Attachment..... serial number ..... Year .....

Max. capacity [kg]: .....

Attachment..... serial number ..... Year .....

Max. capacity [kg]: .....

Owner: .....

Machine commissioning date: .....

FOR FURTHER CONTROLS OR REPORTS TO THE COMPETENT AUTHORITIES, PLEASE REFER TO THE LOCAL LEGISLATION IN FORCE IN THE COUNTRY WHERE THE MACHINE IS USED.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

RECORD OF SCHEDULED INSPECTIONS AND MAINTENANCE WORK

REGULAR MAINTENANCE 50 h

Job	Job accomplished ☒
check hydraulic plant pipe leaks	☐
Lubrication of boom articulation pin	☐
Lubrication of feet pins/head swivel jack	☐
Lubrication of feet pins/head raising jack	☐
Lubrication of feet pins/head levelling jack	☐
Lubrication of front/rear wheel articulation pins	☐
Lubrication of front/rear axle oscillation bushing	☐
Lubrication of cross and Cardan transmission shafts	☐
Lubrication of internal boom tubes	☐
Lubrication of boom rollers and chains	☐
	☐
	☐
	☐

Date ..... **Signature** .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... **Signature** .....

REGULAR MAINTENANCE 100 h

Job	Job accomplished ☒
Air filter cleaning	☐
Lubrication of differential axles	☐
checking tyre pressure	☐
A general check of nuts and bolts tightness	☐
check brake oil level	☐
check boom chain extension and conditions	☐
check safety stickers	☐
	☐
	☐
	☐
	☐
	☐
	☐

Date ..... **Signature** .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... **Signature** .....

- CAUTION -

The maintenance work in bold type is considered fundamental by *DIECI* for people's safety.

- CAUTION -

Maintenance must be carried out by qualified personnel who must sign the scheduled maintenance report.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

REGULAR MAINTENANCE 250h

Job	Job accomplished ☒
Replace engine oil filter	☐
Engine oil filter replacement	☐
Check battery electrolyte level	☐
Check electrical system	☐
Check alternator belt	☐
Tighten wheel nuts	☐
Replace fuel filter	☐
Replace cab filter	☐
Tighten boom sliders	☐
boom check chain tension	☐
	☐
	☐
	☐

Date ..... **Signature** .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... **Signature** .....

REGULAR MAINTENANCE 500 h

Job	Job accomplished ☒
Fuel tank discharge	☐
Cleaning fuel tank filters	☐
Clean fuel injection pump filter	☐
Check differential sump oil level	☐
Check epicycloidal reduction gear oil level	☐
Check gear oil level	☐
Replace hydraulic system oil	☐
Replace external hydraulic oil filters	☐
Cleaning of hydraulic oil tank filters	☐
Parking brake registration	☐
Replace engine air filter.	☐
	☐
	☐

Date ..... **Signature** .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... **Signature** .....

- CAUTION -

The maintenance work in bold type is considered fundamental by *DIECI* for people's safety.

- CAUTION -

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REGULAR MAINTENANCE 1000h

Job	Job accomplished ☒
Replacing cooling liquid	☐
Replace differential sump oil	☐
Replace oil in epicycloidal reduction gears	☐
Replace gear oil	☐
Replace brake oil	☐
check boom chain	☐
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Date ..... **Signature** .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... **Signature** .....

REGULAR MAINTENANCE h

Job	Job accomplished ☒
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Date ..... **Signature** .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... **Signature** .....

- CAUTION -

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REGULAR MAINTENANCE h

Job	Job accomplished ☒
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Date ..... Signature .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... Signature .....

REGULAR MAINTENANCE h

Job	Job accomplished ☒
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Date ..... Signature .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... Signature .....

- CAUTION -

The tables must be completed clearly using the spaces provided.

- CAUTION -

Maintenance must be carried out by qualified personnel who must sign the scheduled maintenance report.

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

REGULAR MAINTENANCE h

Job	Job accomplished ☒
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Date ..... Signature .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... Signature .....

REGULAR MAINTENANCE h

Job	Job accomplished ☒
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Date ..... Signature .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... Signature .....

- CAUTION -

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- CAUTION -

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- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

REGULAR MAINTENANCE h

Job	Job accomplished ☒
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Date ..... Signature .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... Signature .....

REGULAR MAINTENANCE h

Job	Job accomplished ☒
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Date ..... Signature .....

SPECIAL MAINTENANCE

Job description	Machine working hours

Date ..... Signature .....

- CAUTION -

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- CAUTION -

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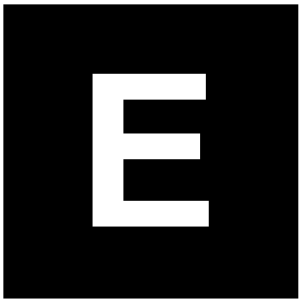
- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

ELECTRICAL
E
CIRCUITS



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DIECI

BASIC SYSTEM KEY – DRAWING No. E25800-049

NAME	DESCRIPTION	SHEET
A149	Left speaker	9.3
A150	Right speaker	9.3
A151	Radio	9.2
A565	Pre-heating control box.	1.4
B130	Seat micro switch	1.4
B138	Micro inching ~	3.5
B139	Stop lights micro switch	4.3
B182	A/C thermal contact	2.4
B205	Conditioner pressure switch	5.5
B503	Horn	5.5
B504	Front outrigger micro switch Left	4.4
B512	Fuel level sensor	2.4
B513	Hydraulic oil filter pressure switch	1.3
B534	Gear engaged micro switch	1.3
B535	2nd gear pressure switch	3.1
B537	Water thermistor	6.1
B538	Engine oil pressure switch	1.3
B544	Lifting/exten. sensor	1.4
B545	Optional sensor	8.5
B546	Water thermal contact	8.4
B550	Front outrigger micro switch Right	1.4
B554	Negative brake pressure switch	2.4
B557	Load cell n°2	2.4
B558	Front axle sensor aligned	2.2
B559	Load cell n°1	8.4
B560	Rear axle sensor aligned	2.1
B561	Filter thermistor	8.4
E102	Right front work light	1.2
E103	Right rear work light	7.2
E104	Left front work light	7.4
E118	Left rear work light	7.2
E127	Revolving light	7.3
E147	Ceiling light	5.2
E522	Right rear light	9.1
E524	Plate light	4.1
E526	left frontlight	4.2
E551	Right front light	4.3
E526	Left front light	4.1
E548	Right rear light	4.2
E551	Right front light	8.3
F1	Fuse +15 outrigger button	9.2
F2	Fuse +15 radio and antenna	2.2
F3	Buzzer and reverse light fuse	2.2
F4	Fuse +15 transmission + relay K9	6.1
F5	Fuse +15 boom head solenoid valve. Boom head socket and positive set-up Centring handler	10.2
F6	Fuse +15 basket positive, +12V from ARB OK (pow.supp. Joystick)	8.4
F7	Fuse +15 pneumatic seat	2.5
F8	Fuse +15 inching micro switch and drive micro switch	2.4
F9	Fuse +15 axle block	2.5
F10	Fuse +15 Lighting switches and warning	4.1
F11	Fuse +15 light switch (full and dipped bean switch) and stop lights	

BASIC SYSTEM KEY – DRAWING No. E25800-049

NAME	DESCRIPTION	SHEET
F12	Fuse +15 boom sensors, axle align sensors and negative brake pressure switch	8.2
F13	Fuse + 15 PTO, rear solenoid valves and trailer	6.1
F14	Fuse + 15 position lights left front and right rear lights	4.1
F15	Fuse + 15 position lights right front and left rear lights	4.1
F16	Fuse +30 full beam head lights	4.2
F17	Fuse +30 horn	4.4
F18	Fuse +30 dipped beam head lights	4.2
F19	Fuse +15 front windscreen wiper and front pump	4.3
F1G	Alternator fuse	1.1
F20	Fuse +15 rear windscreen wiper and rear pump	5.2
F21	Fuse +15 2nd pump and arm suspension	10.2
F22	Fuse + 15 front work lights	7.3
F23	Fuse + 15 rear work lights	7.3
F24	Fuse +15 radiator solenoid valve + fan inversion	5.3
F25	Fuse +15 heating fan speed selector switch	5.3
F26	Fuse +15 KEY power supply Start gear	2.1
F27	Fuse +15 KEY seat micro switch, int. seat timer (int. Negative brake), anti-tip relay, engine start and stop	1.2
F28	Fuse +30 lights switch (pos lights), lights switch (flashing+ horn) and warning	4.1
F29	Fuse +30 revolving light	5.1
F2G	Filter pre-heating fuse (optional)	1.1
F30	Fuse +30 radio and ceiling light	9.2
F31	Fuse +30 arm work lights switch	7.4
F32	Fuse +30 current socket	4.4
F33	Fuse +15 steering	7.2
F34	Fuse +15 electric windscreen winder	10.3
F35	Fuse +15 KEY equipment and basket selector switch (basket not inserted)	10.2
F36	Fuse +15 KEY ALGA AGRI + SAR	1.2
F3G	Filter pre-heating fuse (optional)	1.1
F4G	Start-up fuse	1.1
F128	Optional power supply fuse	9.4
F174	Evaporator relay fuse	1.2
G1	BATTERY	1.1
G529	ALTERNATOR	1.1
H502	Reverse buzzer	2.5
HA1	Instrument alarm buzzer	1.3
K1	Full beam headlights relay	4.2
K2	Horn relay	4.4
K3	Drive disconnection relay	2.3
K4	Buzzer and reverse light relay	2.2
K5	Start switch relay with gear in neutral	1.5
K6	Seat micro switch timer	1.4
K7	Dipped beam headlights relay	4.2
K8	Optional anti-tipping relay	10.2
K9	Fast gear relay	2.2
K10	Safety reverse relay	2.1
K11	Start consent from cab relay with operator sitting	1.4
K12	Optional relay	8.3
K13	Optional sensor relay	8.2
K14	Axle block relay	2.4

BASIC SYSTEM KEY – DRAWING No. E25800-049

NAME	DESCRIPTION	SHEET
K15	Safety forward gear relay	2.1
K16	Start anti-repeat control unit	1.4
K17	Anti-tipping relay	10.1
K18	Lifting/exten. sensor relay	8.3
K19	Axle release relay	8.4
K20	Micro inching relay	2.4
K21	Intermittence	4.3
K153	Services relay	1.1
K159	Engine stop relay from basket	10.3
K160	Services relay	10.3
K161	Int. relay 2nd pump	10.4
K162	UP + low boom relay	10.4
K163	Windscreen winder relay	10.5
K164	Windscreen winder relay	10.5
K173	Evaporator electric fan relay	5.4
K530	Starting relay	1.1
K531	Filter pre-heating relay	1.2
K547	Heat starter relay	1.5
M112	Front windscreen wiper motor	4.3
M117	Windscreen washer front pump	4.3
M122	Rear windscreen wiper	5.2
M129	Heating motor	5.4
M133	Evaporator electric fan	5.5
M152	Pneumatic seat	8.5
M179	Window winder motor	10.4
M520	Starter Motor	1.1
M555	A/C compressor	5.2
P101	ALGA with SAR instrument	1.2
R510	Resistance	1.3
R533	Filter pre-heating resistance	1.2
S1	BATTERY ISOLATOR SWITCH	1.1
S105	Outriggers consent button	3.4
S106	Rear work lights switch	7.3
S108	Warning Switch	4.4
S109	Levelling button	8.1
S110	Mechanical gear change button	3.5
S111	Boom head solenoid valve switch	6.2
S113	Left front outrigger	3.1
S114	Right front outrigger	3.2
S115	Revolving light switch	5.1
S116	ARB exclusion stable key	10.5
S120	Rear windscreen wiper/washer switch	5.3
S121	Parking brake switch	2.2
S126	Fan speed selector	5.5
S131	Rear solenoid valve switch	6.4
S132	Trailer button	6.4
S136	Wheels alignment button	8.2
S137	Start gear	2.1
S140	Guide lights switch	4.3

BASIC SYSTEM KEY – DRAWING No. E25800-049

NAME	DESCRIPTION	SHEET
S141	Starting control board	1.1
S142	Axle block switch	8.3
S143	Radio control switch	3.3
S144	2nd pump switch	8.4
S145	A/C switch	5.4
S146	Manoeuvre restore unstable key	10.5
S148	Front work lights switch	7.2
S156	PTO switch	6.3
S169	Boom suspension switch	6.2
S170	Boom head socket switch	6.1
S171	Fan inversion button	5.4
S180	Window winder button	10.4
S192	Brake oil level sensor	1.5
S202	Steering selector	7.1
S203	Lights switch	4.1
S204	Mushroom-shaped emergency button	10.1
S206	Boom work lights switch	7.4
W177	Radio antenna	9.1
X165	Current socket	4.5
Y507	Right outrigger descent solenoid valve	3.3
Y508	Right outrigger ascent solenoid valve	3.2
Y509	Left outrigger descent solenoid valve	3.1
Y514	Outriggers general solenoid valve	3.4
Y515	Right outrigger ascent solenoid valve	3.2
Y516	1st mechanical gear solenoid valve	3.5
Y518	Left levelling solenoid valve	8.1
Y519	Right levelling solenoid valve	8.1
Y521	2nd mechanical gear solenoid valve	3.4
Y523	Parking brake Ev.	2.3
Y527	2nd mechanical gear Forward gear	2.2
Y528	2nd mechanical gear Reverse	2.2
Y536	Engine stop	1.2
Y632	Hydraulic fast gear solenoid valve	2.3
X7	CONTROL UNIT CONNECTOR FUSES AND RELAY	
X8	CONTROL UNIT CONNECTOR FUSES AND RELAY	
X13	CONTROL UNIT CONNECTOR FUSES AND RELAY	
X14	CONTROL UNIT CONNECTOR FUSES AND RELAY	
X20	CONTROL UNIT CONNECTOR FUSES AND RELAY	
X22	CONTROL UNIT CONNECTOR FUSES AND RELAY	
X26	CONTROL UNIT CONNECTOR FUSES AND RELAY	
X99	CONTROL UNIT CONNECTOR FUSES AND RELAY	1
X123	SAR CALIBRATION CONNECTOR	
X124	INTERFACE CONNECTOR L. RIGHT DASHBOARD - L. DRIVER POSITION	
X125	INTERFACE CONNECTOR L. CAB ROOF - L. DRIVER POSITION	6
X134.p	DO NOT CONNECT CONNECTOR WITH X134.s	6
X134.s	DO NOT CONNECT CONNECTOR WITH X134.p	
X135	INTERFACE CONNECTOR L. DASHBOARD OX - L. DRIVER POSITION	10
X154.p	BASKET INTERFACE CONNECTOR	10
X154.s	BASKET COUNTERFIGURE CONNECTOR	10

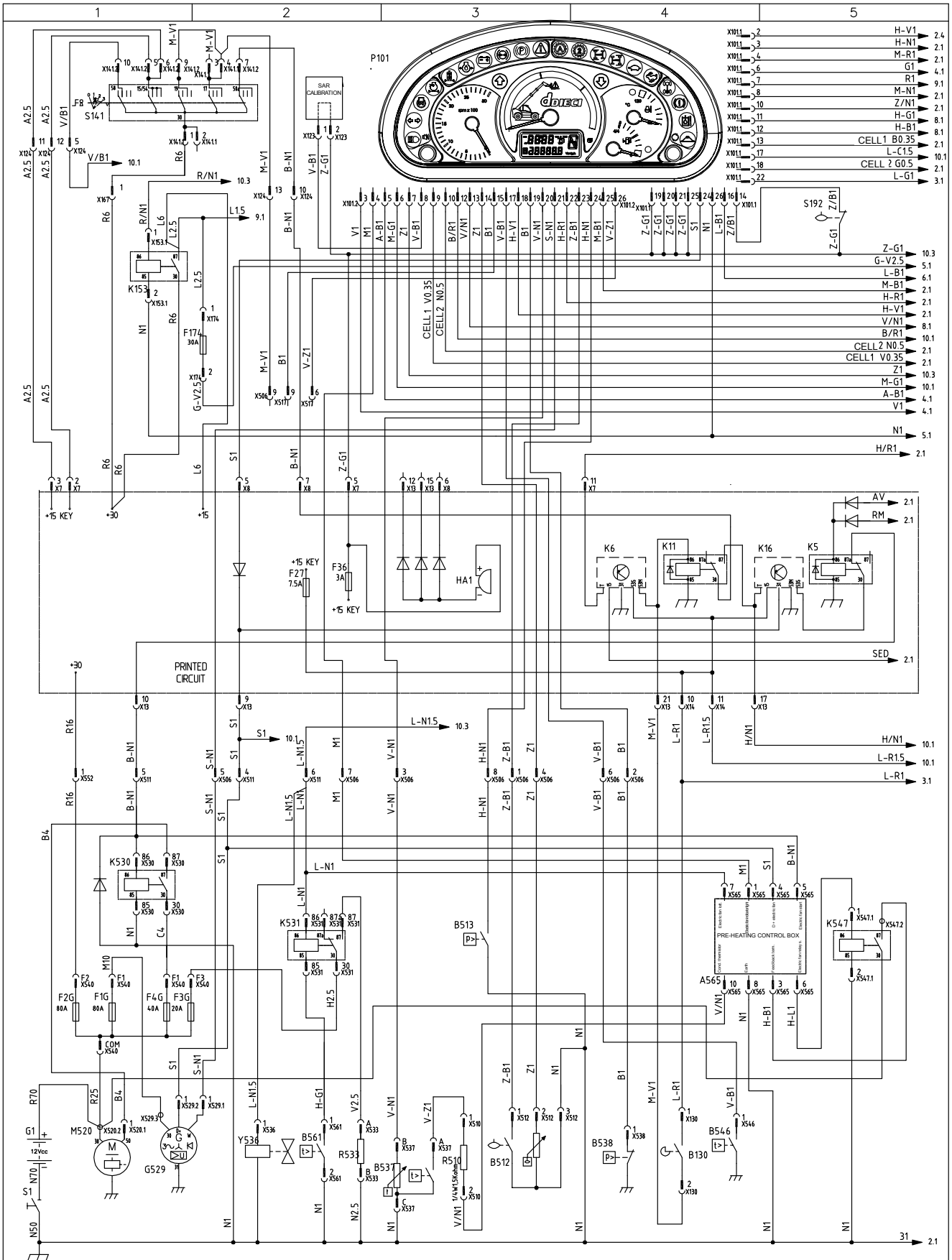
WIRE COLOURS

A	***SKY BLUE***
B	***WHITE***
C	***ORANGE***
G	***YELLOW***
H	***GREY***
L	***DARK BLUE***
M	***BROWN***
N	***BLACK***
R	***RED***
S	***PINK***
V	***GREEN***
Z	***PURPLE***

NOTE:
WIRES WITH TWO COLOURS ARE INDICATED BY COMBINING THE SYMBOLS ABOVE, FOR EXAMPLE:

G/V - YELLOW/GREEN (HORIZONTAL STRIPES)

Y-G- YELLOW-GREEN (VERTICAL STRIPES)



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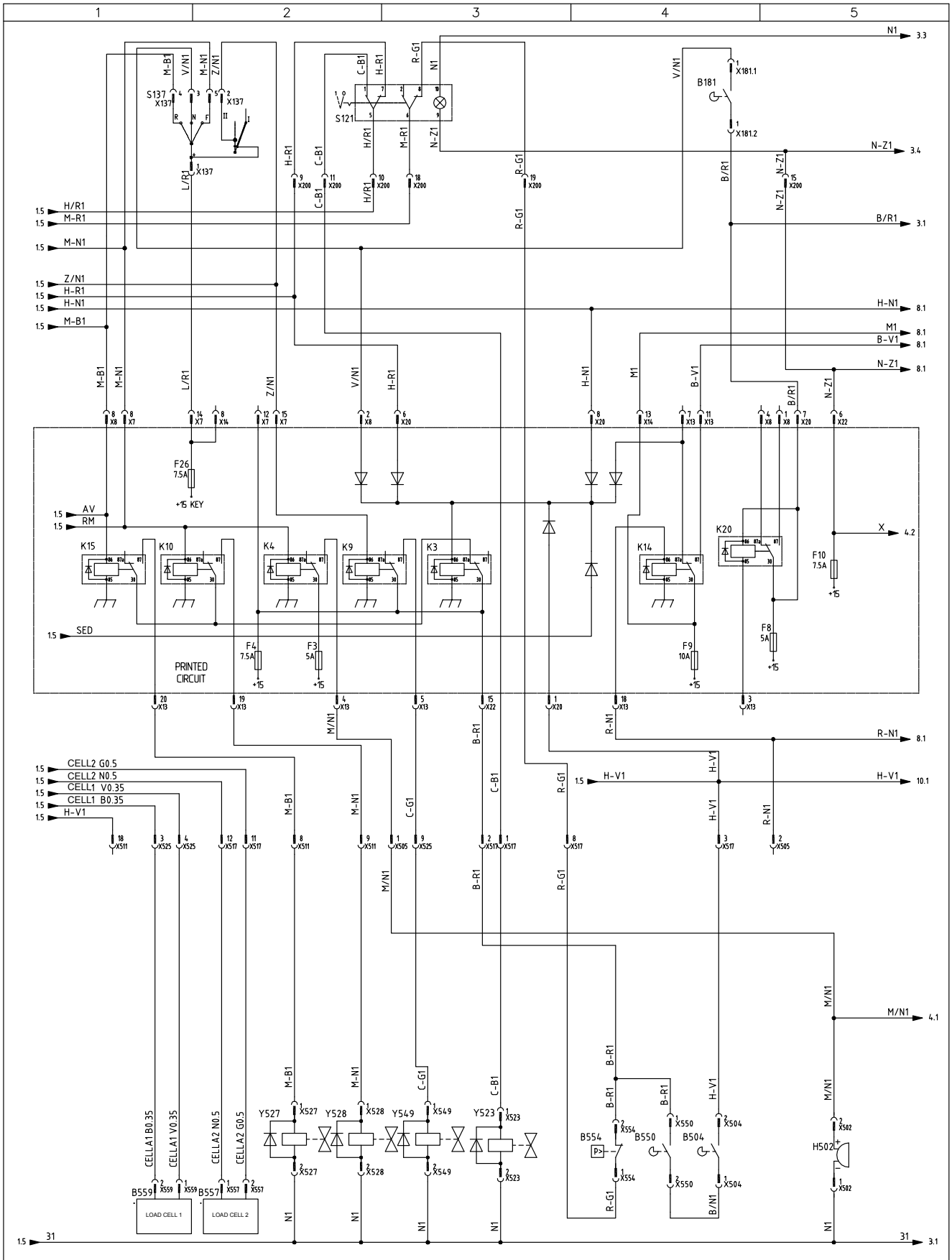

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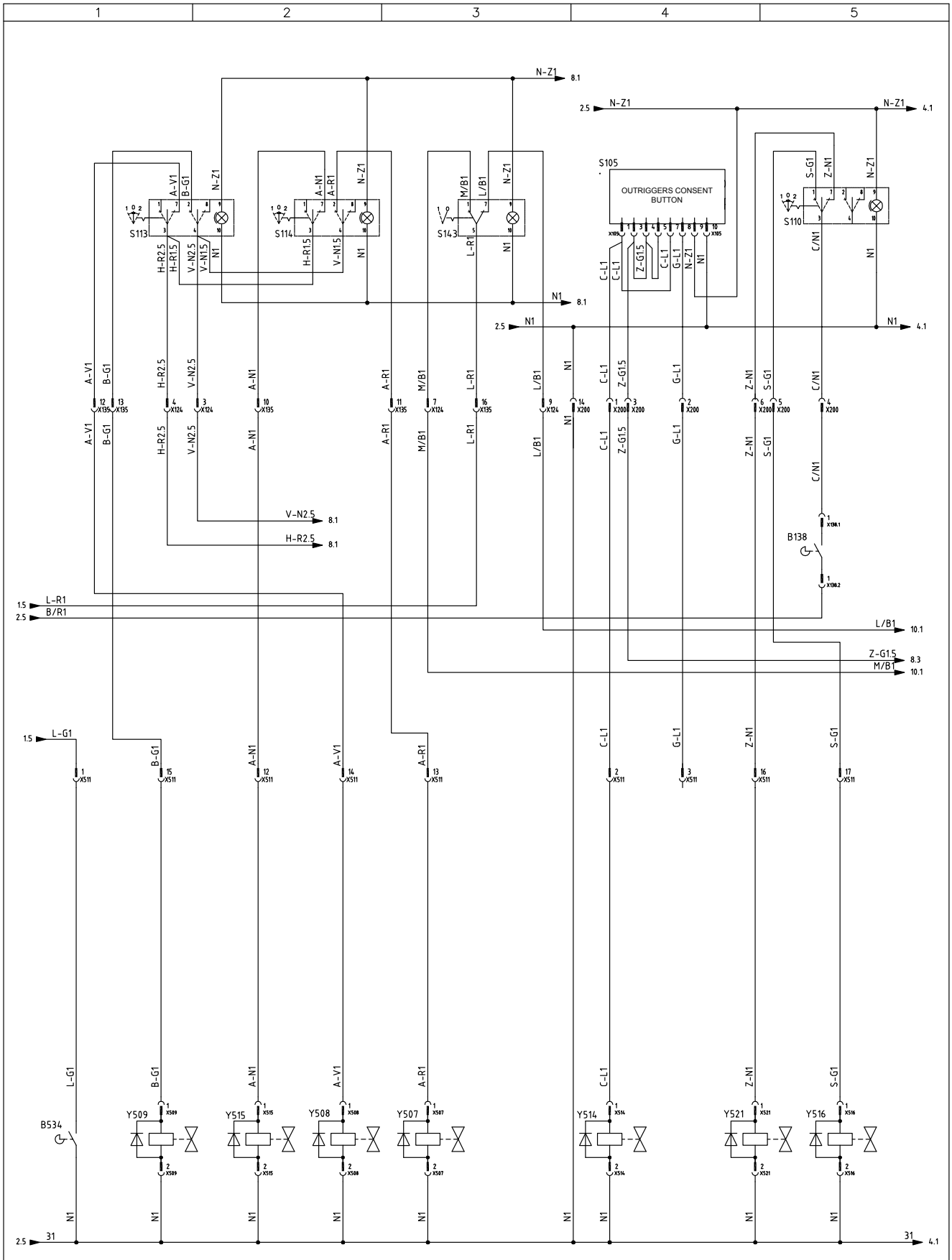

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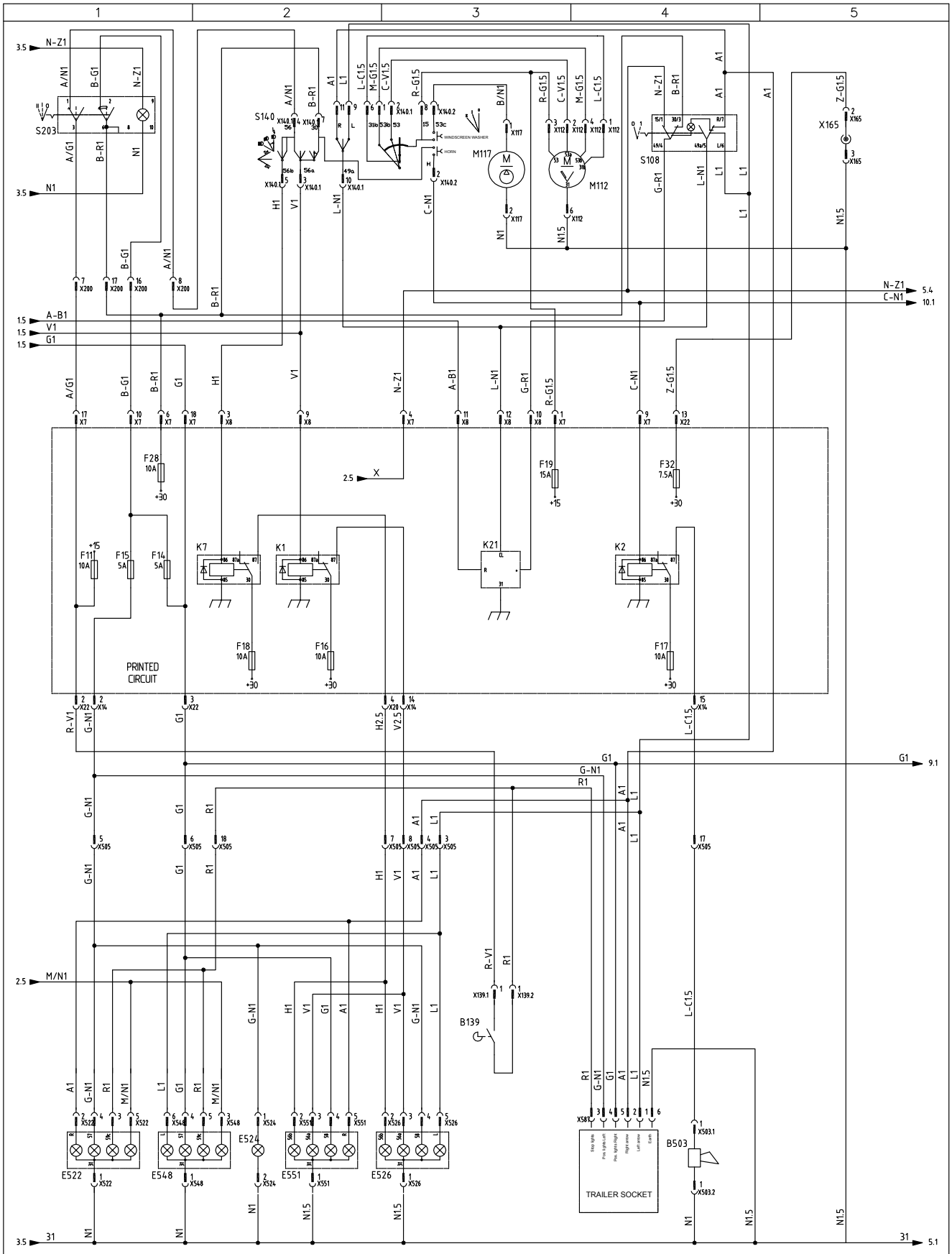

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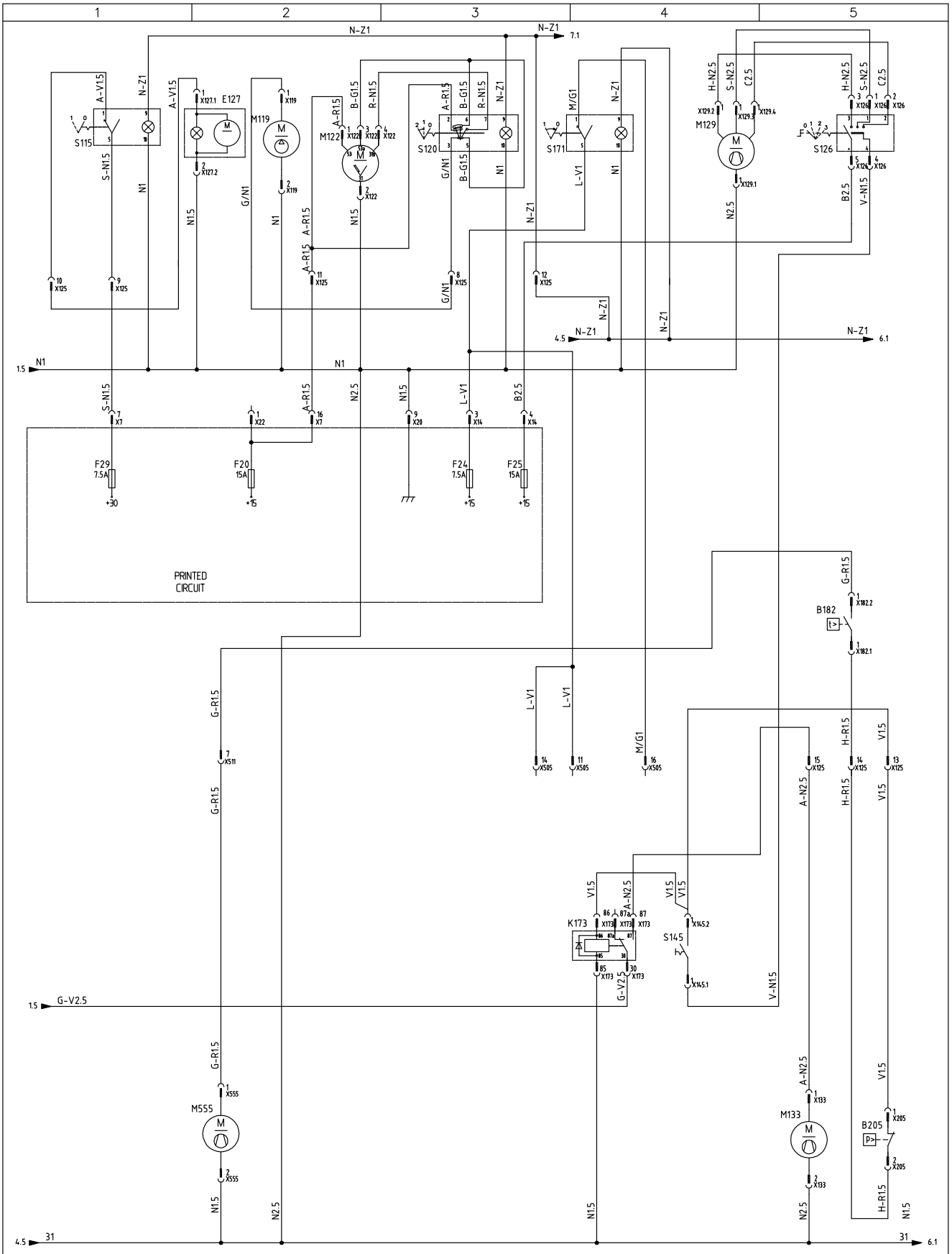

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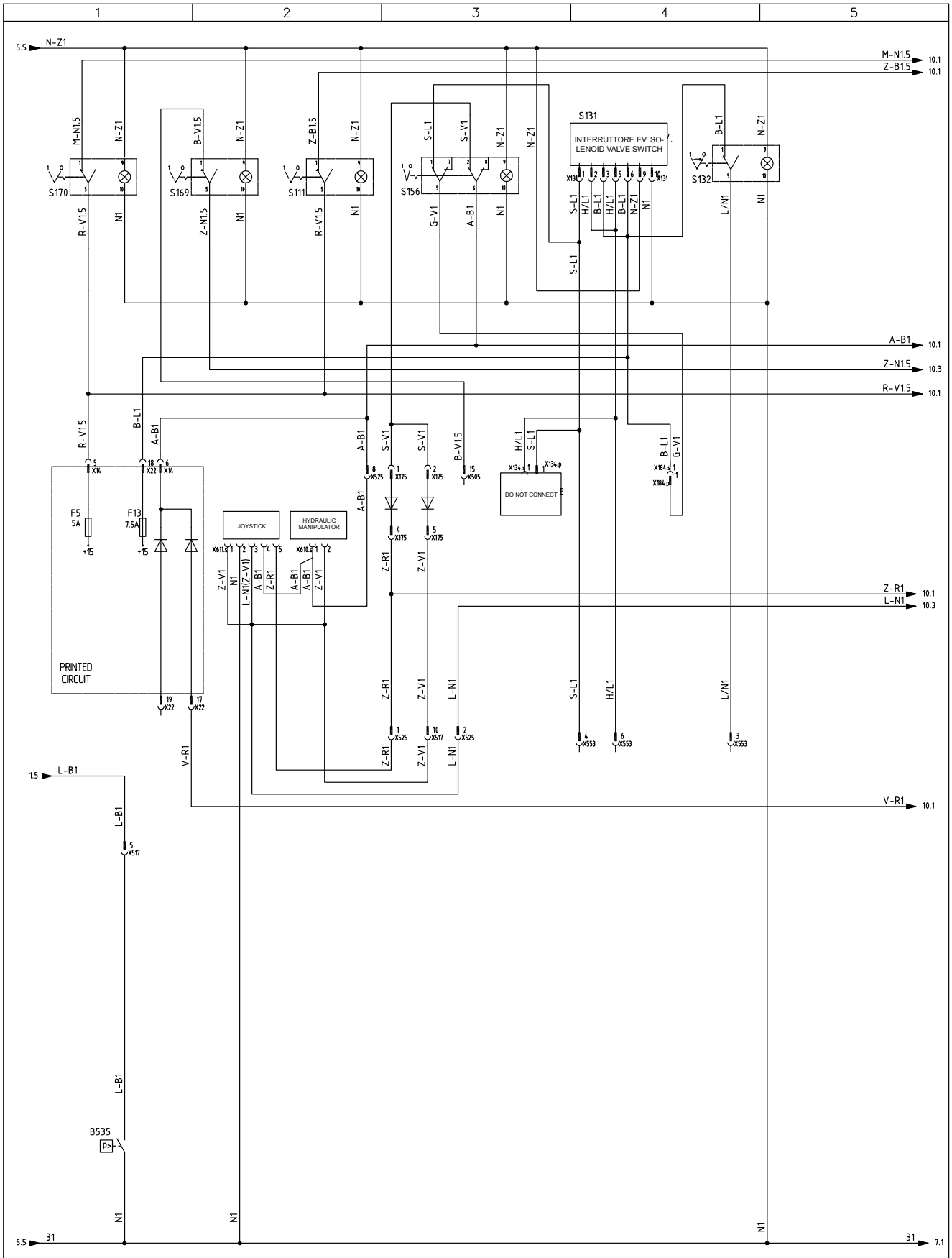

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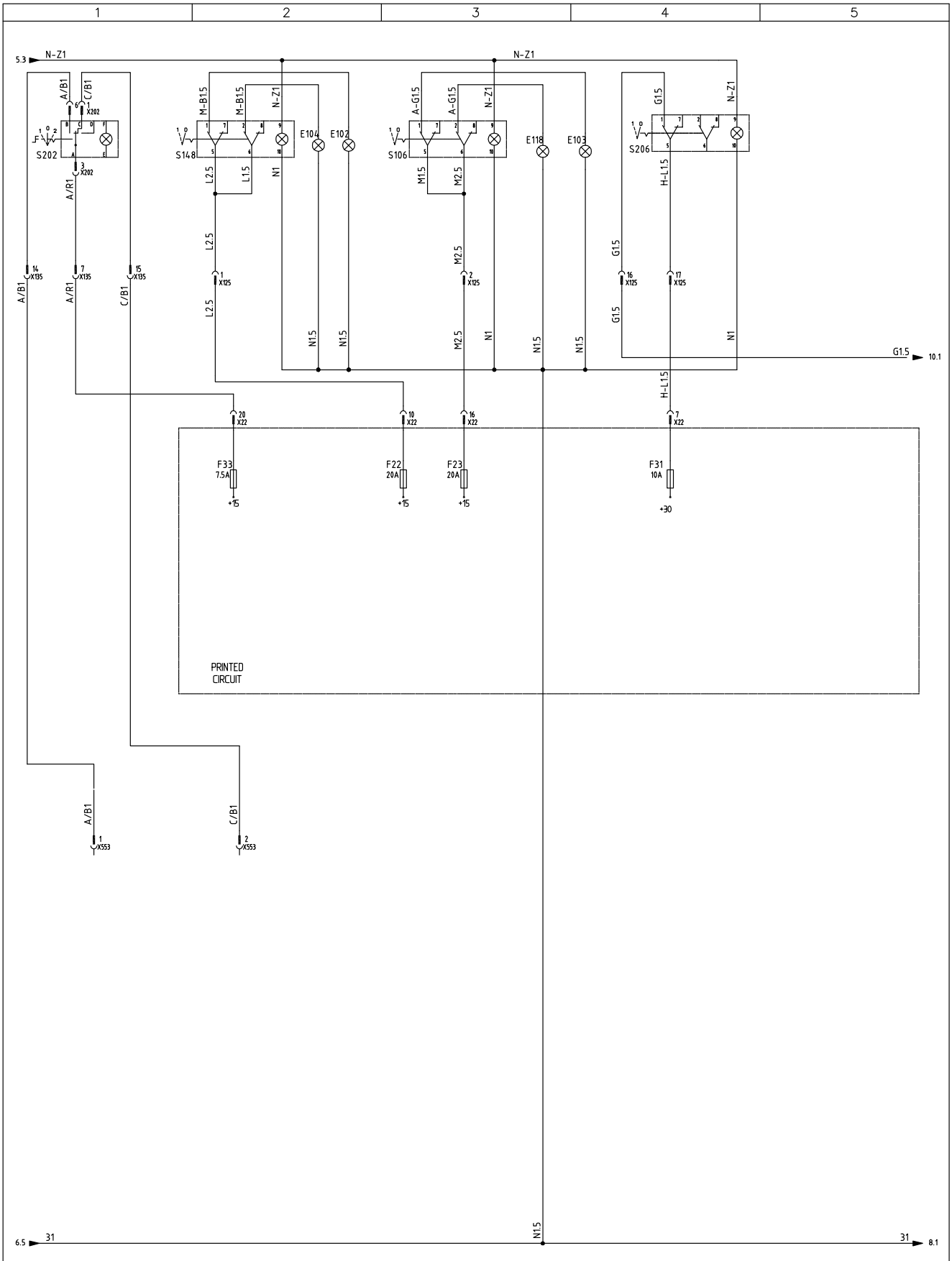

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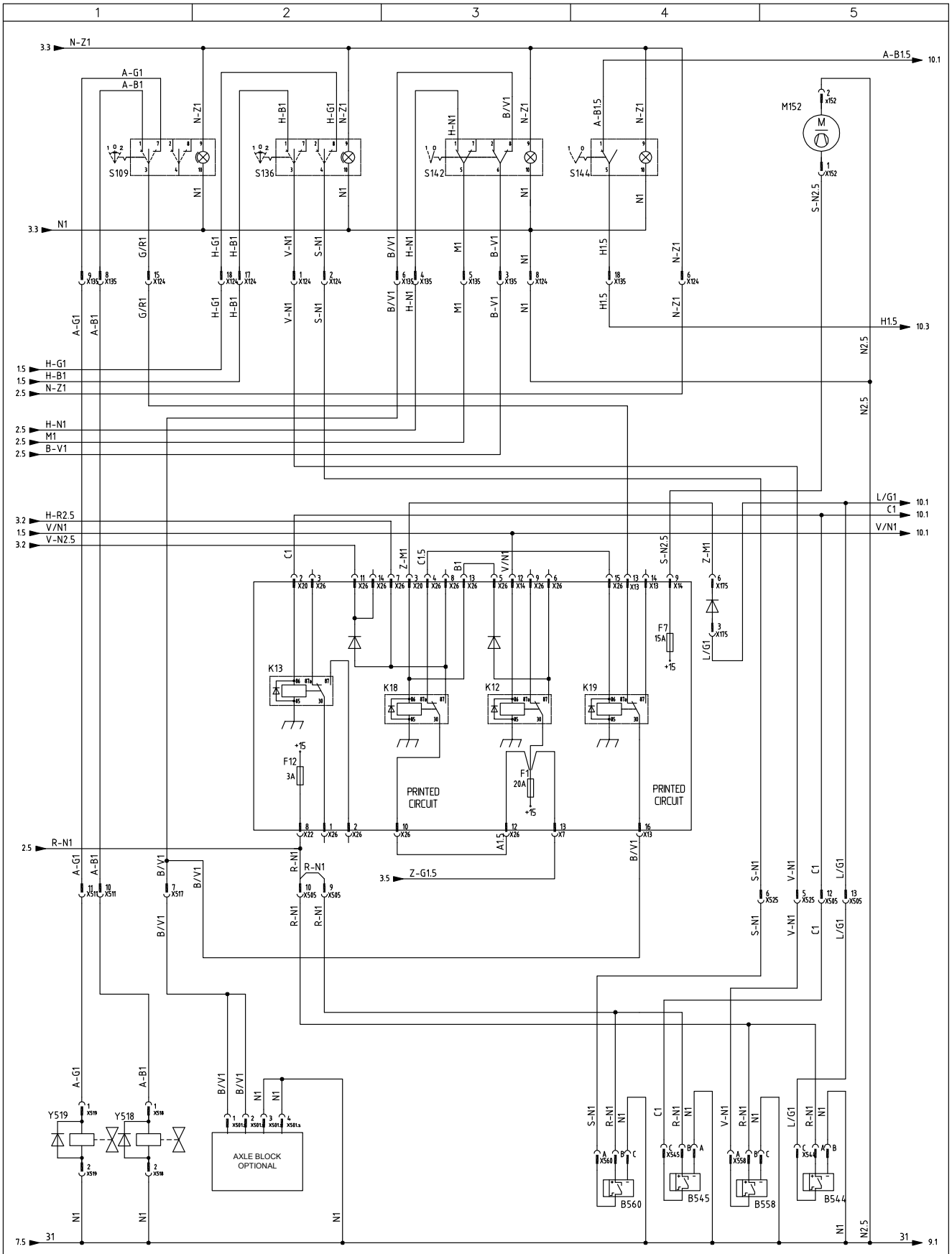

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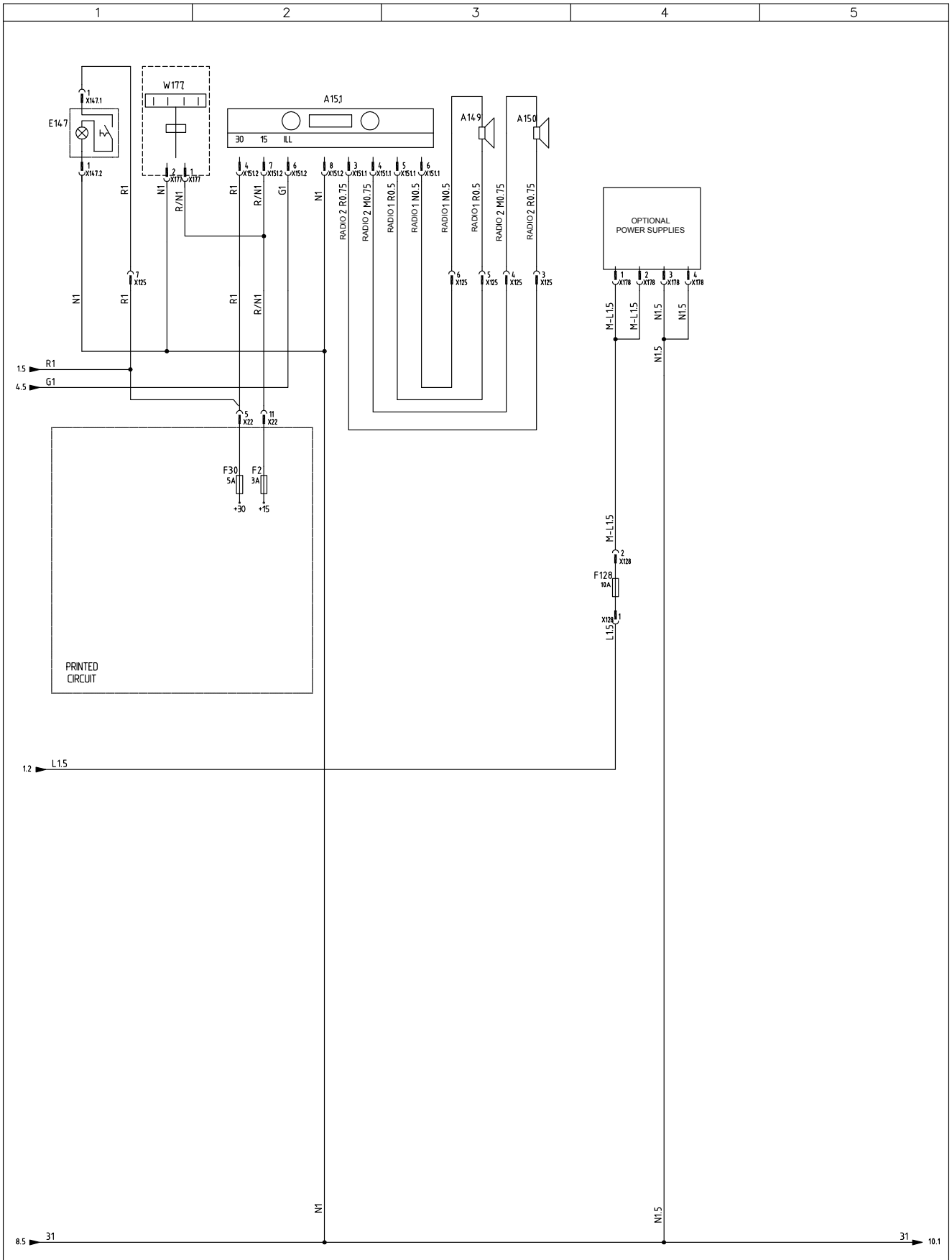

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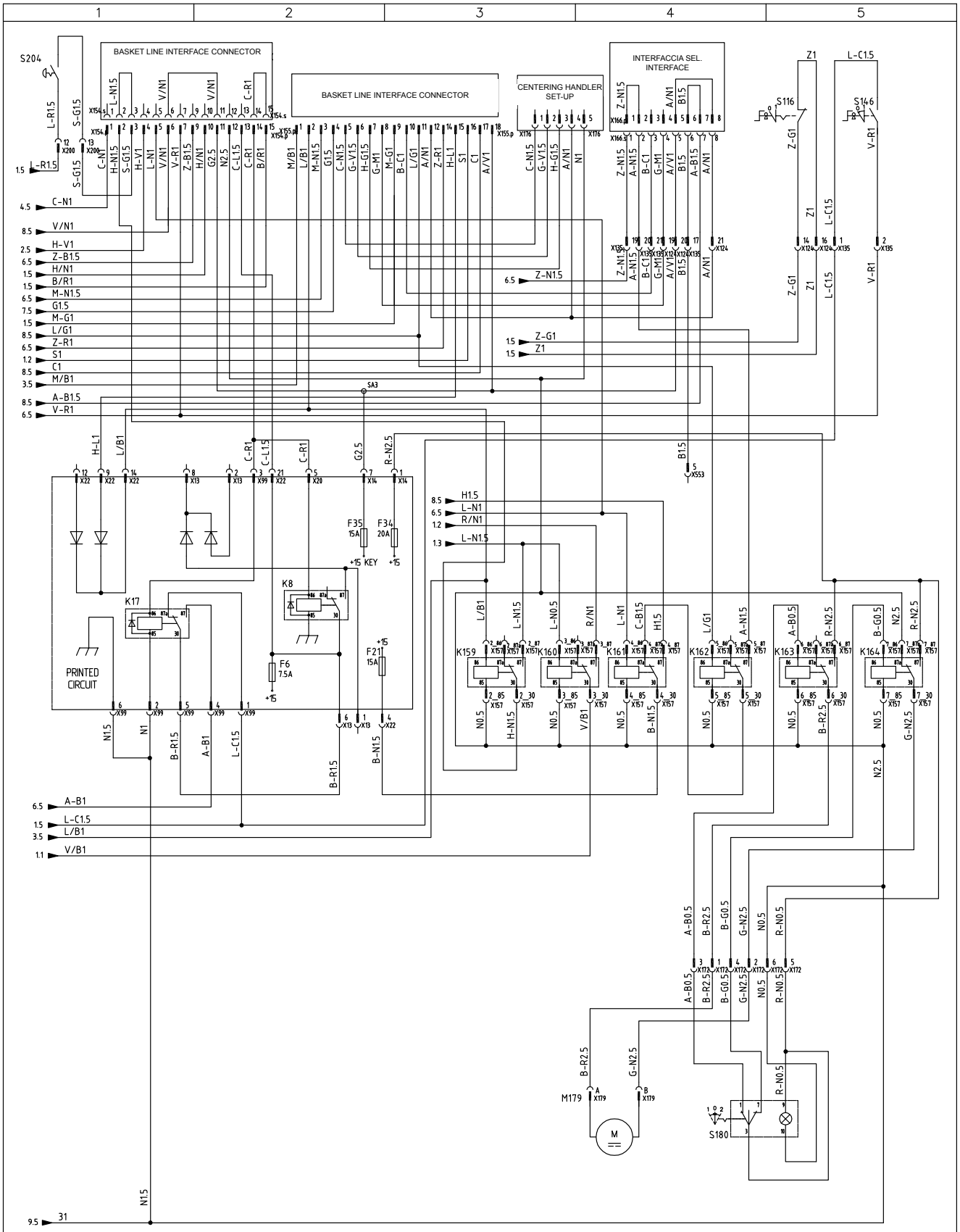

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macchine edili ed agricole
DIECI

HYDRAULIC CIRCUIT

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

EVERY MODIFICATION MADE TO THE VEHICLE LEADS TO A NEW VERIFICATION OF CONFORMITY WITH THE 2006/42 MACHINERY DIRECTIVE **“CE“** ***THIS PROCEDURE IS ALSO VALID IN THE CASE OF REPAIRS WITH NON-ORIGINAL SPARE PARTS.***

IT IS PROHIBITED TO OPERATE IF THIS MANUALHAS NOT BEEN READ AND UNDERSTOOD.

ANY ARBITRARY MODIFICATION MADE TO THE VEHICLE WILL ABSOLVE DIECI FROM ALL LIABILITY FOR DAMAGE OR INJURY RESULTING FROM SUCH MODIFICATION.

TO GUARANTEE YOUR SAFETY AND THAT OF OTHERS, DO NOT MODIFY THE STRUCTURE OR ADJUST THE VARIOUS VEHICLE COMPONENTS BY YOURSELF (HYDRAULIC PRESSURE, CALIBRATION OF LIMITING DEVICES, ENGINE ROTATION, ASSEMBLY OF ADDITIONAL ATTACHMENTS ETC.). THE SAME HOLDS TRUE FOR THE DEACTIVATION OR MODIFICATION OF SAFETY SYSTEMS. IN SUCH CASES, THE MANUFACTURER SHALL BE ABSOLVED FROM ALL LIABILITY.

THE IMAGES, DESCRIPTIONS, MEASUREMENTS, GIVEN IN THIS CHAPTER REFER TO STANDARD VEHICLES.

UPON REQUEST, YOUR VEHICLE CAN BE FITTED WITH OPTIONAL CONTROLS AND ATTACHMENTS.

ALL FUNCTIONS, PROCEDURES, INHERENT THE USE AND SET-UP OF VEHICLE EQUIPMENT, NOT DESCRIBED IN THIS MANUAL, ARE PROHIBITED.

USE OF THE VEHICLE FOR PURPOSES DIFFERENT THAN THOSE DESCRIBED IN THIS MANUAL IS STRICTLY FORBIDDEN.

IT IS MANDATORY TO HAVE READ AND LEARNED CHAPTER “B“ (SAFETY STANDARDS) BEFORE READING CHAPTER “C” AND USING THE VEHICLE.

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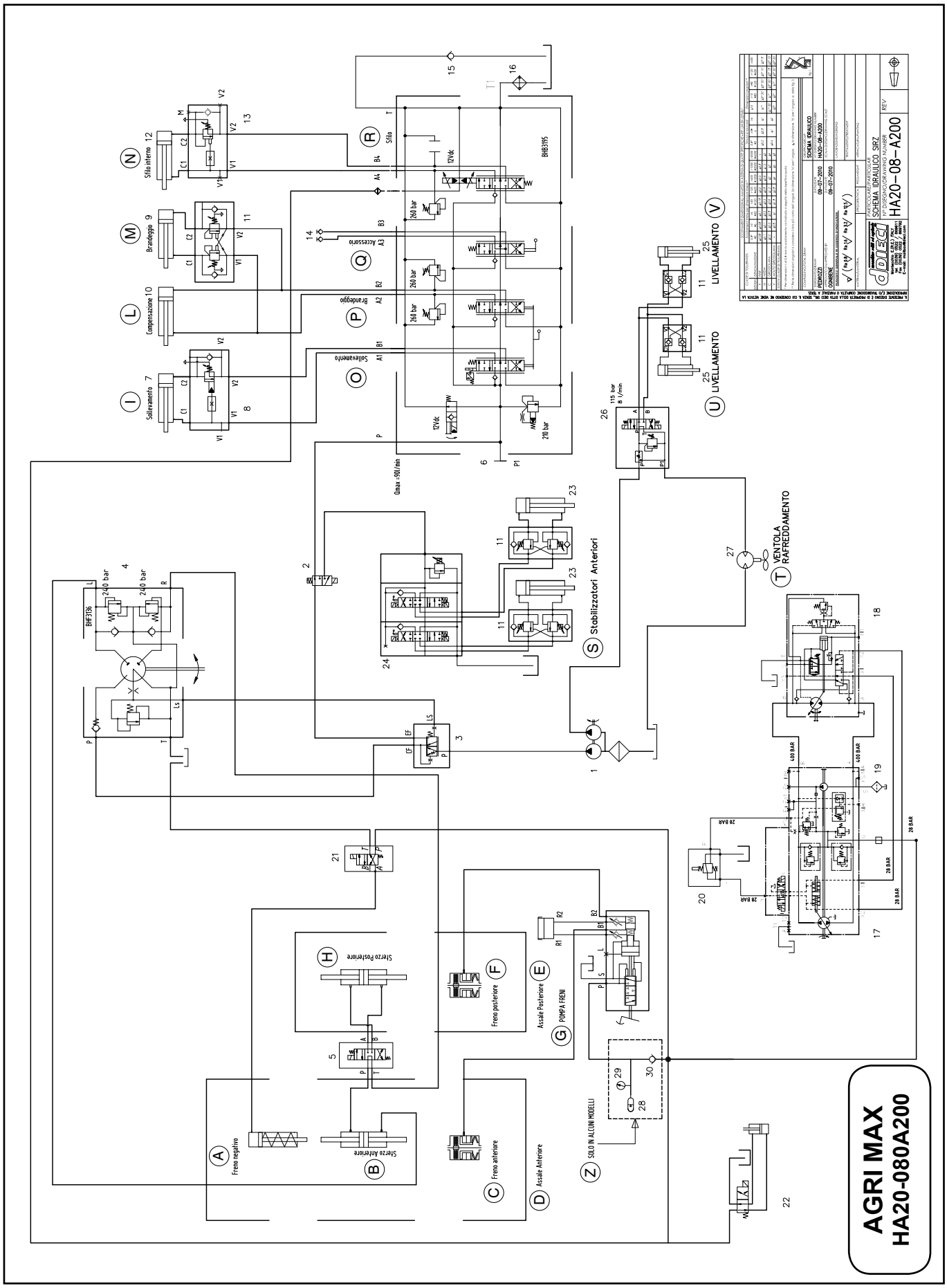


- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

HYDRAULIC PLANT KEY

AGRI MAX - HA20-08A200

1. pump
2. heat exchanger valve
3. priority valve
4. power steering
5. steering distributor
6. boom distributor
7. lifting piston
8. lock valve
9. swivel cylinder
10. compensation cylinder
11. lock valve
12. Extension cylinder
13. lock valve
14. boom head socket
15. non-return valve
16. heat exchanger
17. hydrostatic pump
18. hydrostatic motor
19. Hydrostatic oil filter
20. inching valve
21. negative brake valve
22. speed change valve
23. front outriggers
24. outrigger valve
25. levelling cylinder
26. levelling valve
27. fan hydraulic engine
28. accumulator
29. manometer
30. non-return valve

A - NEGATIVE BRAKE

B - FRONT STEERING

C - FRONT BRAKE

D - FRONT AXLE

E - REAR BRAKE

E - BACK AXLE

G - BRAKES PUMP

H - REAR STEERING

I - LIFTING

L - COMPENSATION

M - SWIVEL

N - CYLINDER GUIDE

O - LIFTING

P - SWIVELLING

Q - ATTACHMENT

R - EXTENSION

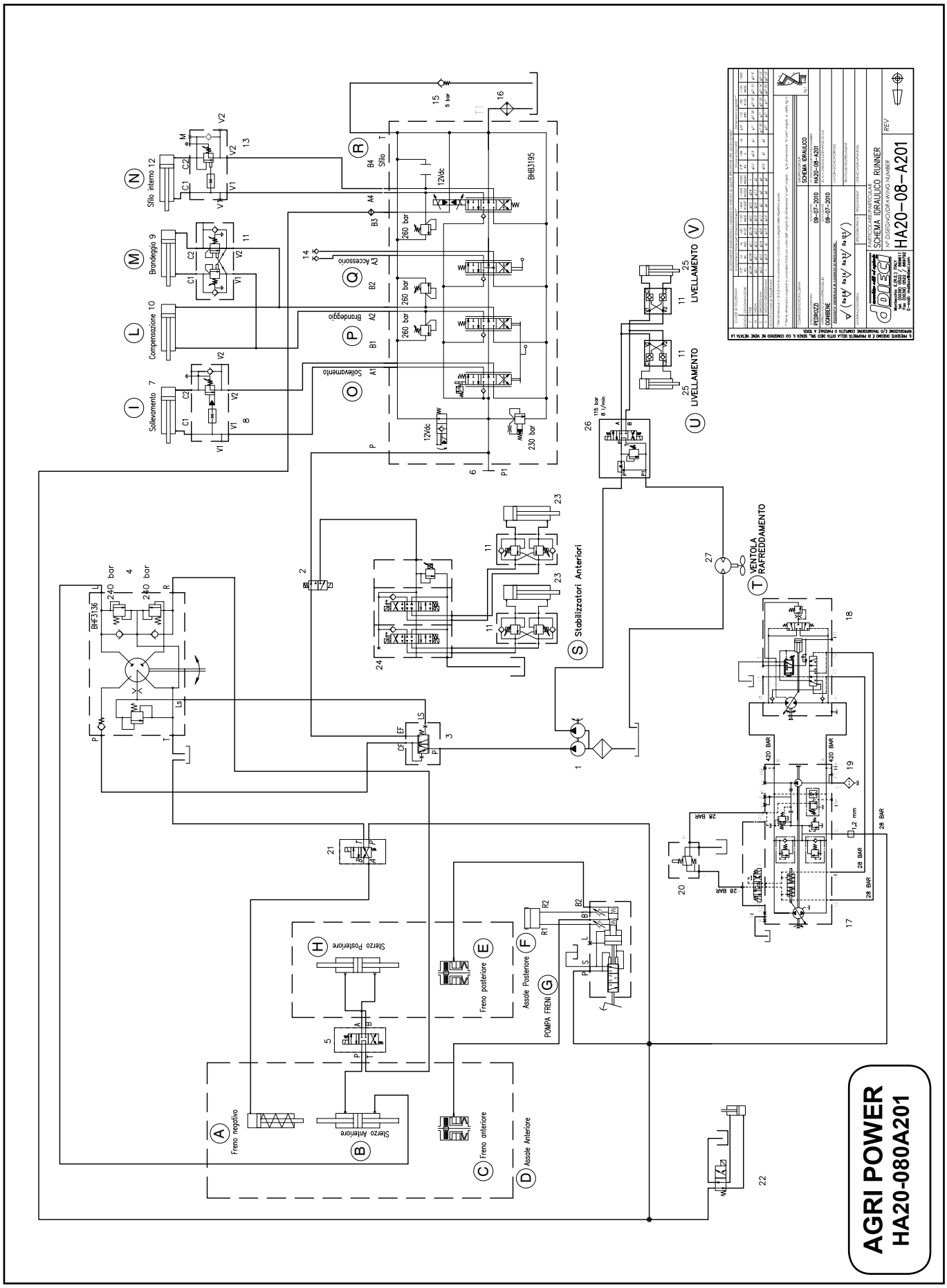
S - FRONT OUTRIGGERS

T - COOLING FAN

U - LEVELLING

V - LEVELLING

Z - ONLY IN SOME MODELS



- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

HYDRAULIC PLANT KEY

AGRI POWER - HA20-08A201

1. **pump**
2. **heat exchanger valve**
3. **priority valve**
4. **power steering**
5. **steering distributor**
6. **boom distributor**
7. **lifting piston**
8. **lock valve**
9. **swivel cylinder**
10. **compensation cylinder**
11. **lock valve**
12. **Extension cylinder**
13. **lock valve**
14. **boom head socket**
15. **non-return valve**
16. **heat exchanger**
17. **hydrostatic pump**
18. **hydrostatic motor**
19. **Hydrostatic oil filter**
20. **inching valve**
21. **negative brake valve**
22. **speed change valve**
23. **front outriggers**
24. **outrigger valve**
25. **levelling cylinder**
26. **levelling valve**
27. **fan hydraulic engine**

A - NEGATIVE BRAKE

B - FRONT STEERING

C - FRONT BRAKE

D - FRONT AXLE

E - REAR BRAKE

E - BACK AXLE

G - BRAKES PUMP

H - REAR STEERING

I - LIFTING

L - COMPENSATION

M - SWIVEL

N - CYLINDER GUIDE

O - LIFTING

P - SWIVELLING

Q - ATTACHMENT

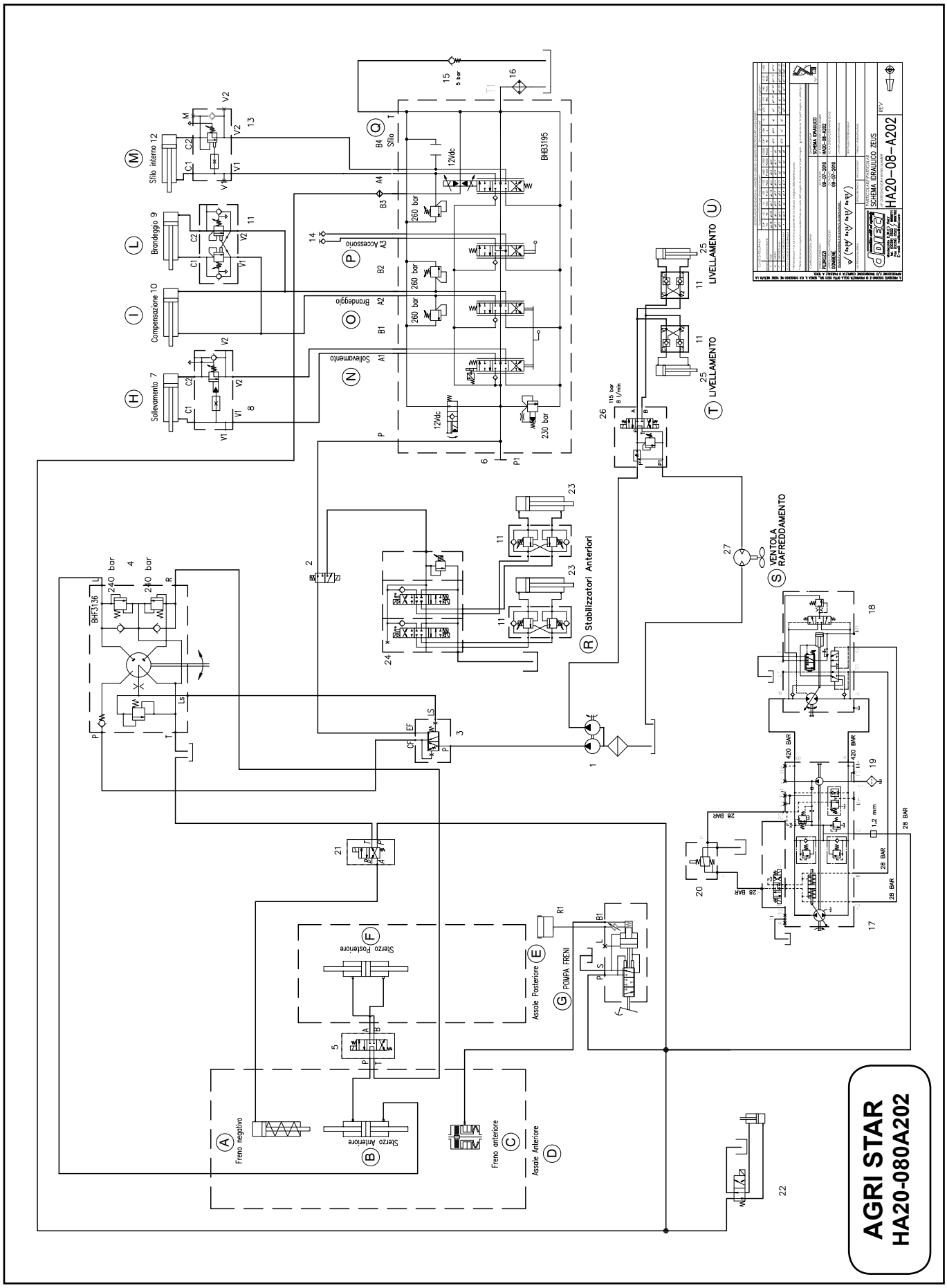
R - EXTENSION

S - FRONT OUTRIGGERS

T - COOLING FAN

U - LEVELLING

V - LEVELLING



- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

HYDRAULIC PLANT KEY

AGRI STAR - HA20-08A202

1. **pump**
2. **heat exchanger valve**
3. **priority valve**
4. **power steering**
5. **steering distributor**
6. **boom distributor**
7. **lifting piston**
8. **lock valve**
9. **swivel cylinder**
10. **compensation cylinder**
11. **lock valve**
12. **Extension cylinder**
13. **lock valve**
14. **boom head socket**
15. **non-return valve**
16. **heat exchanger**
17. **hydrostatic pump**
18. **hydrostatic motor**
19. **Hydrostatic oil filter**
20. **nching valve**
21. **negative brake valve**
22. **speed change valve**
23. **front outriggers**
24. **outrigger valve**
25. **levelling cylinder**
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27. **fan hydraulic engine**

A - NEGATIVE BRAKE

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O - SWIVELLING

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Q - EXTENSION

R - FRONT OUTRIGGERS

S - COOLING FAN

T - LEVELLING

U - LEVELLING

- CAUTION: - Read the SAFETY REGULATIONS (in this manual) carefully for the safety of all personnel and the machine.

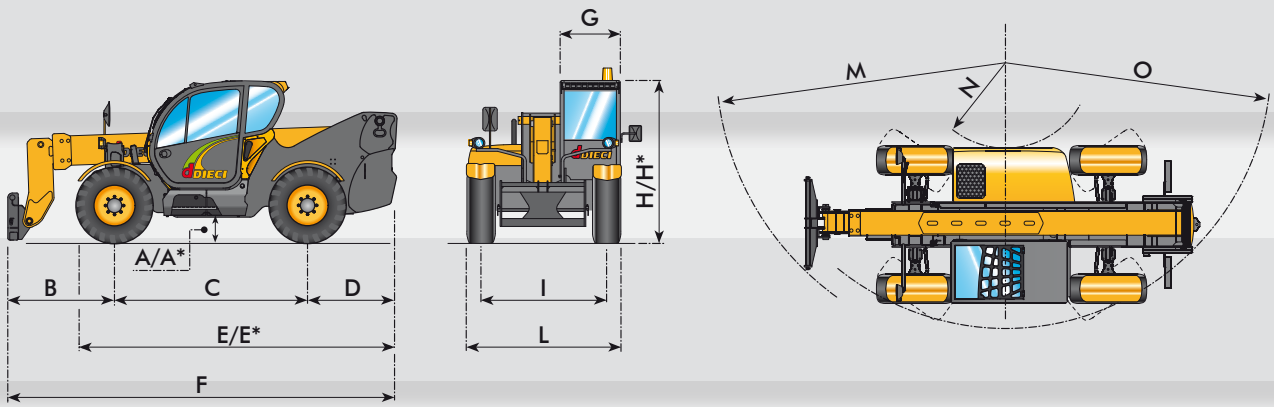
TECHNICAL DATA
and
TECHNICAL SPECIFICATIONS

Agri Max

DIMENSIONS	45.8	70.10
A/A*	440/480*	440/N.A.
B	1480	1630
C	2600	2950
D	860	1330
E/E*	4000/4050*	4820/N.A.
F	4940	5910
G	940	940
H/H*	2460/2500*	2490/N.A.
I	1910	1920
L	2310	2360
M	4080	4730
N	1260	1700
O	3920	4400

Measurements expressed in millimetres

A* - E* - H* = Measurements referring to optional wheels



A* - E* - H* = Measurements referring to optional wheels

PERFORMANCE

	45.8	70.10
Maximum capacity (kg)	4.500	7.000
Maximum lifting height (m)	7,90	9,65
Maximum horizontal outreach (m)	4,45	5,40
Outreach at maximum height (m)	0,30	0,70
Fork swivelling angle	134°	134°
Pull-out force (daN)	5.700	5.700
Towing force (daN)	7.300	7.300
Maximum climb angle	40%	40%
Total weight empty (kg)	8.700	11.300
Max speed (km/h)	30	30
	(On request 40 Km/h)	

BOOM

Times: empty / with speed supplement *(in seconds)*	45.8	70.10
Lifting	15,5 / 11,3	20,7 / 15,1
Descent	10,6 / 7,7	13,6 / 9,9
Extension	8,1 / 5,9	14,2 / 10,4
Retraction	4,5 / 3,3	5,6 / 4,1
Forward swivelling	3,9 / 2,8	6,4 / 4,6
Reverse swivelling	2,4 / 1,8	2,8 / 2,0
	Patented compensation system	

ENGINE

	Iveco NEF 74 Kw	Iveco NEF 93 Kw
Model:	Iveco NEF	Iveco NEF
Maximum power kW (hp):	74 (101)	93 (127)
Revolutions per minute (rpm):	2200	2200
Operation:	4 stroke diesel	
Injection:	Direct mechanical	
Number and arrangement of cylinders:	4, vertical in line	
Engine size (cm3):	4485	4485
Specific consumption at 2200 rpm (g/kWh):	230	230
	Aftercooler Turbo compressor	
	Liquid cooling system	

HYDRAULIC PLANT

Gear pump with capacity at max. speed:	110 lt/1'
Max operational pressure:	230 bar
Distributor control with joystick:	3 in 1

DIFFERENTIAL AXLES

- Steering axles: 2, with planetary reduction gears
- Steering types: 4 wheels / transversal / 2 wheels
- Front axle: rigid (levelling upon request)
- Back axle: oscillating
- Oil bath service braking on the 4 wheels with double hydraulic plant and servo brake
- Negative action parking brake

REFUELLING *(Litres)*

	45.8	70.10
Hydraulic plant (total)	155	160
Fuel tank	105	105

OPTIONALS AND ACCESSORIES

A/C; Webasto Heater; Digital speedometer; Water Heater; Driver's seat with pneumatic suspension; Light on boom head; Quick coupling for accessories; Radio; Anti-theft system; Glass protection.

(For additional customizations, contact the area dealer)

DRIVE

- Hydrostatic drive with variable displacement pump.
- Hydraulic engine with automatic adjustment.
- Electrical - hydraulic inversion.
- Inching pedal for controlled advancement.
- Servocontrolled 2-speed gearbox.

DEVICES AS PER STANDARD

- Anti-tipping device with pejorative movement block.
- Hydraulic socket for any accessories on the boom head.
- Soundproof closed cab, ROPS-FOPS approved, with heater.
- Self-blocking front axle differential (limited slip 45%).
- Electric window winder.

TYPE-APPROVAL

- Type-approval as a driving agricultural machine.
- Machine is not suitable for towing trailers on public roads and roads for public use.

TYRES

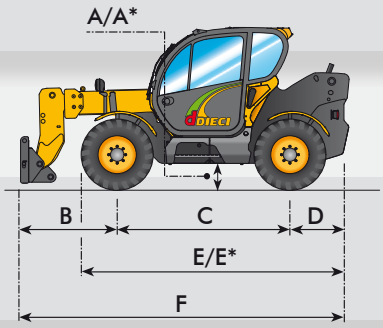
	45.8	70.10
Tyres	16/70x20"	18/22.5"
Alternative	405/70x24"	/

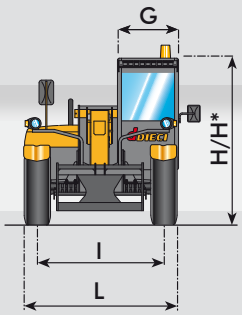
Agri Power

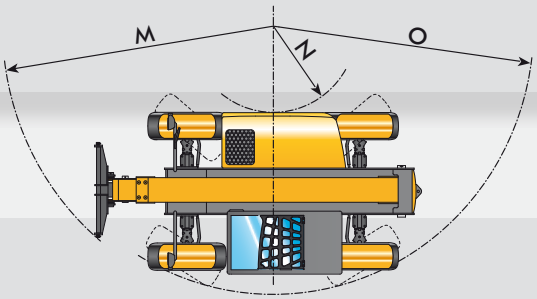
DIMENSIONS	30.7	30.8	30.9
A/A*	440/480*	440/480*	440/480*
B	1180	1480	1970
C	2600	2600	2600
D	860	860	860
E/E*	4000/4050*	4000/4050*	4000/4050*
F	4640	4940	5430
G	940	940	940
H/H*	2460/2500*	2460/2500*	2460/2500*
I	1910	1910	1910
L	2310	2310	2310
M	3930	4080	4420
N	1260	1260	1260
O	3920	3920	3920

Measurements expressed in millimetres

A* - E* - H* = Measurements referring to optional wheels







A* - E* - H* = Measurements referring to optional wheels

PERFORMANCE

	30.7	30.8	30.9
Maximum capacity (kg)	3.000	3.000	3.000
Maximum lifting height (m)	7,30	7,90	8,80
Maximum horizontal outreach (m)	3,85	4,45	5,35
Outreach at maximum height (m)	0,00	0,30	0,50
Fork swivelling angle	134°	134°	134°
Pull-out force (daN)	5.700	5.700	5.700
Towing force (daN)	7.300	7.300	7.300
Maximum climb angle	40%	40%	40%
Total weight empty (kg)	7.700	8.000	8.300
Max speed (km/h)	30	30	30
	(On request 40 Km/h)		

BOOM

	30.7	30.8	30.9
Times empty *(in seconds)*			
Lifting	11,8	11,8	11,8
Descent	6,9	6,9	6,9
Extension	6,1	8,1	10,5
Retraction	3,0	4,5	4,6
Forward swivelling	3,9	3,9	3,9
Reverse swivelling	2,4	2,4	2,4
	Patented compensation system		

ENGINE

	Iveco NEF 74 Kw	Iveco NEF 93 Kw
Model:	Iveco NEF	Iveco NEF
Maximum power kW (hp):	74 (101)	93 (127)
Revolutions per minute (rpm):	2200	2200
Operation:	4 stroke diesel	
Injection:	Direct mechanical	
Number and arrangement of cylinders:	4, vertical in line	
Engine size (cm3):	4485	4485
Specific consumption at 2200 rpm (g/kWh):	230	230
	Aftercooler Turbo compressor	
	Liquid cooling system	

HYDRAULIC PLANT

Gear pump with capacity at max. speed:	110 lt/1'
Max operational pressure:	230 bar
Distributor control with joystick:	3 in 1

DIFFERENTIAL AXLES

Steering axles: 2, with planetary reduction gears

Steering types: 4 wheels / transversal / 2 wheels

Front axle: rigid (levelling upon request)

Back axle: oscillating

Oil bath service braking on the 4 wheels with double hydraulic plant and servo brake

Negative action parking brake

REFUELLING *(Litres)*

Hydraulic plant (total)	155
Fuel tank	105

OPTIONALS AND ACCESSORIES

A/C; Webasto Heater; Digital speedometer; Water Heater; Driver's seat with pneumatic suspension; Light on boom head; Quick coupling for accessories; Radio; Anti-theft system; Glass protection.

(For additional customizations, contact the area dealer)

DRIVE

Hydrostatic drive with variable displacement pump.

Hydraulic engine with automatic adjustment.

Electrical - hydraulic inversion.

Inching pedal for controlled advancement.

Servocontrolled 2-speed gearbox.

DEVICES AS PER STANDARD

Anti-tipping device with pejorative movement block.

Hydraulic socket for any accessories on the boom head.

Soundproof closed cab, ROPS-FOPS approved, with heater.

Self-blocking front axle differential (limited slip 45%).

Electric window winder.

TYPE-APPROVAL

Type-approval as a driving agricultural machine.

Machine is not suitable for towing trailers on public roads and roads for public use.

TYRES

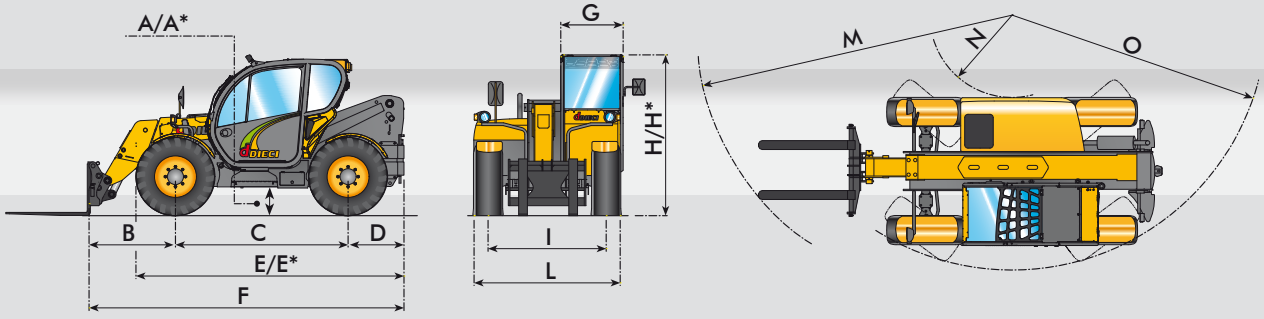
Tyres	16/70x20"
Alternative	16/70x24"

Agri Star

DIMENSIONS	37.7	37.8	35.10	38.10
A/A*	440/480*	440/480*	440/480*	440/480*
B	1380	1680	1380	1380
C	2600	2600	2600	2600
D	970	970	970	970
E/E*	4110/4160*	4110/4160*	4110/4160*	4110/4160*
F	4950	5250	4950	4950
G	940	940	940	940
H/H*	2290/2340*	2290/2340*	2290/2340*	2290/2340*
I	1780	1780	1780	1780
L	2220	2220	2220	2220
M	4810	5060	4810	4810
N	1240	1240	1240	1240
O	3840	3840	3840	3840

Measurements expressed in millimetres

A* - E* - H* = Measurements referring to optional wheels



A* - E* - H* = Measurements referring to optional wheels

PERFORMANCE

	37.7	37.8	35.10	38.10
Maximum capacity (kg)	3.700	3.700	3.500	3.800
Maximum lifting height (m)	7,35	7,93	9,75	9,75
Maximum horizontal outreach (m)	4,00	4,60	6,50	6,45
Outreach at maximum height (m)	0,20	0,35	0,84	0,84
Fork swivelling angle	130°	130°	130°	130°
Pull-out force (daN)	5.700	5.700	5.700	5.700
Towing force (daN)	7.300	7.300	7.300	7.300
Maximum climb angle	40%	40%	40%	40%
Total weight empty (kg)	7.200	7.850	7.600	7.800
Max speed (km/h)	30	30	30	30
	(On request 40 Km/h)			

BOOM

	37.7	37.8	35.10	38.10
***Times empty** (in seconds)*				
Lifting	10,2	11,8	10,2	10,8
Descent	5,3	6,9	5,3	6,9
Extension	7,3	8,9	10,1	10,1
Retraction	4,1	5,4	7,0	7,0
Forward swivelling	3,7	3,9	3,9	3,9
Reverse swivelling	2,4	2,4	2,4	2,4
	Patented compensation system			

ENGINE

	Iveco NEF 74 Kw	Iveco NEF 93 Kw
Model:	Iveco NEF	Iveco NEF
Maximum power kW (hp):	74 (101)	93 (127)
Revolutions per minute (rpm):	2200	2200
Operation:	4 stroke diesel	
Injection:	Direct mechanical	
Number and arrangement of cylinders:	4, vertical in line	
Engine size (cm3):	4485	4485
Specific consumption at 2200 rpm (g/kWh):	230	230
	Aftercooler Turbo compressor	
	Liquid cooling system	

HYDRAULIC PLANT

Gear pump with capacity at max. speed:	110 lt/1'
Max operational pressure:	230 bar
Distributor control with joystick:	3 in 1

DIFFERENTIAL AXLES

- Steering axles: 2, with planetary reduction gears
- Steering types: 4 wheels / transversal / 2 wheels
- Front axle: rigid
- Back axle: oscillating
- Oil bath service braking on the front axle with servo brake
- Negative action parking brake.

REFUELLING *(Litres)*

Hydraulic plant (total)	140
Fuel tank	95

OPTIONALS AND ACCESSORIES

A/C; Webasto Heater; Digital speedometer; Water Heater; Driver's seat with pneumatic suspension; Light on boom head; Quick coupling for accessories; Radio; Anti-theft system; Glass protection.
(For additional customizations, contact the area dealer)

DRIVE

- Hydrostatic drive with variable displacement pump.
- Hydraulic engine with automatic adjustment.
- Electrical - hydraulic inversion.
- Inching pedal for controlled advancement.
- Servocontrolled 2-speed gearbox.

DEVICES AS PER STANDARD

- Anti-tipping device with pejorative movement block.
- Hydraulic socket for any accessories on the boom head.
- Soundproof closed cab, ROPS-FOPS approved, with heater.
- Self-blocking front axle differential (limited slip 45%).
- Electric window winder.

TOWING CAPACITY *(upon request)*

Trailer without brakes (ton):	3
Mechanical braking (ton):	5
Hydraulic/pneumatic braking (ton):	
74 kW engine	17.5
93 kW engine	20
Including 40 km/h speed	

TYRES

Tyres	16/70x20"
Alternative	405/70x24"

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DIECI

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Servizio **A**ssistenza **T**ecnica - Via E. Majorana, 2-4 - 42027 Montecchio Emilia (RE) ITALY
Tel. +39 0522 869611 - Fax **S.A.T.** +39 0522 869744
www.dieci.com - *E-mail: service@dieci.com*